THE One for AMIGA GAMES

AN EMAP IMAGES PUBLICATION ISSUE 32 MAY 1991 DM 12.00 Lire 10,000 £2.95

FULL GAME!

The Assembly Line's Classic E.MOTION

THE EAGLE HAS LANDED!

MicroProse Clears F-15 for Arrival

First New-Look Issue!

Amazing Giveaway

NO STRINGS ATTACHED

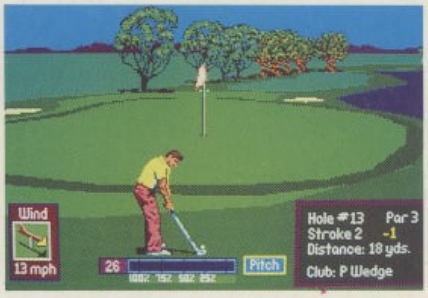
USGold's E.Motion Complete and Ready To Play

CDTV

Worth Selling Your Computer For?

PGA TOUR GOLF

EA Keeps On Swinging



PLUS!

Two Fully-Playable Demos Ocean's Elf and Gem'X from Kaiko

IF Either of Your Disks is Missing - Consult Your Newsagent

THE ULTIMATE IN AMIGA GAMES

- TWO ACTION PACKED DISKS . . .
- AUTHORATIVE REVIEWS AND PREVIEWS . . .
- THE BEST COMPETITIONS . . .
- HINTS AND TIPS FOR THE LATEST AMIGA GAMES . . .

. . . AND MUCH MORE INSIDE!

05
9 770962 289003

PC SIMS...A SUP

WORLD CLASS

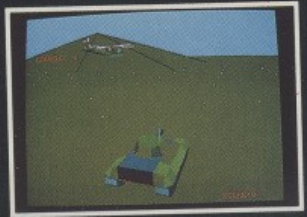
THE MOST ADVANCED SOFTWARE ENTERTAINMENT EXPERIENCE

Take charge of an entire planet from its birth until its death-10 billions years later. Guide life from its inception as single-celled microbes to a civilization that can reach for the stars. THE LIVING PLANET Inspired by James Lovelock's Gaia hypothesis, SimEarth simulates the Earth as a single living organism.

THE THINK TANK

Set in the near future, as an alternative reality, Battle Command is an arcade/strategy game in which the player controls a single "Mauler" Assault Tank in one of 16 scenarios (missions) in the ultra war, fought between two dominant races in the new World. Such are the defensive capabilities of each side, full scale attacks are suicidal, so any offensive moves are, by necessity, small "behind the lines" actions performed by elite troops in specially designed vehicles. The Mauler is the latest such machine - capable of being lifted in and out of hostile territory by fast stealth choppers and armed with the most advanced weaponry the Northern scientists can devise.

ALL AVAILABLE FOR YOUR IBM PC & COMPATIBLES



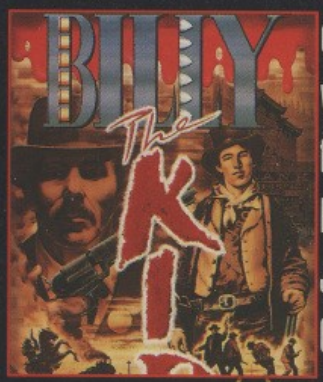
ERIOR SPECIES

THE RIGHT STUFF

F 29 Retaliator presents the fastest and most detailed graphical enviroment ever seen in a flight simulator. This is the only flight simulation to provide 100 complex missions over four intense battle senarios. The only flight simulation to provide detailed daily war update reports. The only flight simulation to present the latest in aerodynamic technology introducing ECOP cockpits, backwinder AAMS, supercruise, stealth and more! F29 Retaliator is that flight simulation.

GUN LAW

"BILLY THE KID" is a one or two player action/strategy game set in the Wild West, which allows the player to assume the identity of either a gun totting desperado with a heart of gold , Billy himself or his ex-best friend, sharp shooting, law abiding pillar of the community, Sheriff Pat Garrett. They are in love with the same woman and ultimately, in a nail biting climatic finale, are going to end up pointing guns at each other. Only one character can walk away from this showdown BUT THAT'S JUST THE WAY OF THE WEST



OCEAN SOFTWARE LTD,
6 CENTRAL ST, MANCHESTER,
M2 5NS.TEL: 061 832 6633
FAX: 061 834 0650

STRATEGY...REALITY...

MEGATRAVELLER 1

THE ZHODANI CONSPIRACY

IBM PC SCREENS SHOWN

Heralded the American computer role-playing game of the year!

Based on Megatraveller by Game Designers Workshop, the world's most popular science-fiction gaming system.

The most sophisticated character generation system ever devised: five military classes, more than seventy talents and abilities. Allows player to control character development through five services: Army, Navy, Marines, Merchants and Scouts.

Twenty-eight planets and satellites to explore in eight systems filled with exciting puzzles, dangerous subjects and interesting characters to encounter.

"Megatraveller 1 is one of the best science-fiction role-playing games ever for the computer"

"Megatraveller 1, a game that truly warrants the highest level of praise, the attention to detail makes it exceptional"

(Quotes taken from Dragon magazine US and Quest Busters magazine US)

Amiga and ST implementations by STeVeN Green

TAKES SCIENCE FICTION ROLE-PLAYING LIGHT YEARS FORWARD

TEAM YANKEE

SO REAL YOU CAN SMELL THE SMOKE

The no. 1 best selling book has now turned into the no. 1 best selling game

Team Yankee is the definitive action simulation of modern tank warfare.
"Team Yankee.... the critics' choice"
Team Yankee is designed to test your leadership and tactical skills to the quick.

AMIGA FORMAT
Team Yankee presents a game, in a sims clothing, which when dealing with tanks has to be the perfect approach!

ACE
The blend of thought and reflexes required to play Team Yankee is exactly right!

ST FORMAT
Hunting the Red Bear has never been so much fun!
You won't be able to tear yourself away from Team Yankee!

STRATEGY PLUS
This is a game and a half! The use of four screens in one is simply brilliant - at times it's almost like playing on four computers at once! I quickly found myself hooked on a genre of game which previously held no interest.

AMIGA ACTION
The tanks have been superbly animated, with great attention to detail! This has to be a must for everyone!

AMIGA SCREENS SHOWN

EMPIRE SOFTWARE, 4 THE STANNETTS, LAINDON NORTH TRADE CENTRE, BASILDON, ESSEX SS15 6DJ. TEL: 0268 541212

AVAILABLE NOW FOR ATARI ST, COMMODORE AMIGA AND IBM PC & COMPATIBLES

The One for AMIGA GAMES
ISSUE 28 MAY 1991
£2.95
FULL GAME!
The Assembly Line's Classic E.MOTION
THE EAGLE HAS LANDED!
MicroProse Clears F-15 for Arrival
First Impressions
Amazing Giveaway
NO STRINGS ATTACHED
USGold's E.Motion
Complete and Ready To Play
CDTV
Worth Selling Your Computer For?
PGA TOUR GOLF
EA Keeps On Swinging
PLUS!
Two Fully-Playable Demos
Ocean's Elf and Gem'X from Kaiko
THE ULTIMATE IN AMIGA GAMES
TWO ACTION PACKED DISKS . . .
AUTHORATIVE REVIEWS AND PREVIEWS . . .
THE BEST COMPETITIONS . . .
HINTS AND TIPS FOR THE LATEST AMIGA GAMES . . .
. . . AND MUCH MORE INSIDE!
If Either Of Your Disks Is Missing - Consult Your Newsagent

MAY 1991

© 1991, EMAP Images, Priory Court, 30-32 Farringdon Lane, London EC1R 3AU.

● **EDITORIAL: Editor** Ciarán Brennan **Group Art Editor** Gareth Jones **Associate Editor** Laurence Scotford **Staff Writer** Paul Presley **Trainee Staff Writer** Julian Watsham **Contributors** John Cook, Steve Cooke, Kati Hamza, Rik Haynes, Gordon Houghton, Brian Nesbitt, Matthew Stibbe, Alastair Swinnerton ● **ADVERTISING: Manager** Cathy Oates **Deputy Manager** Kathryn Boucher **Sales Executive** Ian Knibbs ● **ADMINISTRATION: Publisher** Terry Pratt **Publisher's Assistant** Glenys Powell **Marketing Executive** Sarah Ewing

Typesetting and Artwork by Digital Typesetting, 20 Bowling Green Lane, London EC1R 0BD. Colour Origination by ProPrint, 750-758 Barking Road, London E13. Printed by Southern Print, Upton Factory, Upton, Poole, Dorset. Distributed by BBC Frontline.

Telephone Numbers: Editorial and Advertising 071 251 6222, 071 490 1095 (fax). Subscriptions and Back Issues 0858 410510/410888 (Answerphone). Newstrade Queries (0733) 555161

CONTENTS

6 DOUBLE DISKS
E.Motion, the complete game from US Gold, and fully-playable demos of Kaiko's *Gem'X* and Ocean's *Elf*. Here's all you need to know to extract hours of fun from the two value packed Amiga disks that grace the front cover.

12 LETTERS
Thanks, complaints, suggestions, queries, tirades, pleas... *The One* readers have always been a vociferous bunch.

17 NEWS
Golden Joysticks winners, a new hand-held console from Sega, and the hottest games news.

26 COMPETITION
Fancy a round of golf? Then try and win yourself a luxury golfing weekend courtesy of EA.

28 CYBERZONE
Kati Hamza gets excited at the prospect of the first Virtual Reality television game show. Come on down and read all about it.

32 FUTURE FLIGHTS
The Electronic Battlefield System promises to revolutionise flight simulators. Rik Haynes flies over to the US to find out why.

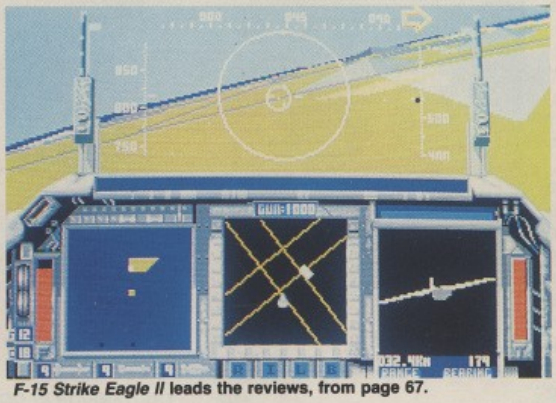
40 IN DEVELOPMENT
Top Industry Talent got together Stateside recently for an International software developers conference. Steve Cooke, the man in the know, got invited along, and tells us all about it.

42 ONE ON ONE
Rik Haynes interrupts the busy schedule of Bullfrog Boss Peter Molyneux, to get the lowdown on one of the most successful development teams.

44 CDTV
Is Commodore's new CD-based machine the ultimate in computer entertainment?

48 VEKTOR GRAFIX
The road to fame has been a hard one for top 3D development team Vektor Grafix. Alastair Swinnerton talks us through the ups and downs.

Virtual gameshow: page 28.



***F-15 Strike Eagle II* leads the reviews, from page 67.**

CDTV – the shape of things to come?

COMPETITION 50
Win yourself a speedboat, courtesy of Domark!

WIP 52
Glynn William's *Fokker* reappears as *Air Duel* and we've an Eldritch The Cat double bill featuring *Tentacle* and *Rybok*.

COMPETITION 62
Look good in leather! Win a genuine flying jacket courtesy of MicroProse.

REVIEW 67
The reviews take off with *F-15 Strike Eagle II*, heading a host of top games all on Amiga, including *PGA Tour Golf*, *Chuck Rock*, and the first *Cadaver* levels disk.

DISNEY DRAWINGS 104
Laurence Scotford grabs his electronic pencil, dives into Disney's *Animation Studio* and finds there's plenty to shout about.

STRATEGY 108
Our third feature from *strategy maestro* Matthew Stibbe. He takes a trip back in time to 1939, and the outbreak of WWII.

DEMOS 111
The inimitable Vic Reeves manages to put in a word or two, while we're awestruck by a Nemesis comic on disk.

ARCADES 114
John Cook takes a stomach churning ride in the first 360° hydraulic cabinet and poses for a snapshot with the PM.

BUDGET 117
More Golden Oldies get The One treatment. This month's line-up includes the classics *IK+*, *Kult* and *Carrier Command*.

TIPS 121
Brian Nesbitt once again comes to the rescue with the final parts of Cadaver and Loom, and much more besides.

THE DISK — E.MO

One of those disks taped to the cover of your favourite magazine contains a complete copy of one of last year's classics – so don't hang about, pop it in your disk drive and away we go...

Imagine a place where the law of inertia rules. A place inhabited by nothing but spherical cells, abstract obstacles, and You. In this shapeless universe, trouble is brewing. The cells that inhabit it are slowly but surely becoming unstable, and before long they will explode taking everything else with them.

Welcome to the weird and wonderful world of *E.Motion*...

With those words, printed back in Issue 18 (March 1990) we ushered in The Assembly Line's classic of surreal gameplay. Now, thanks to unique cooperation between The One and US Gold, we're bringing you the opportunity to become 'E.Motion-al' all over again.

E.Motion is a game that's easier played than described, but here goes anyway...

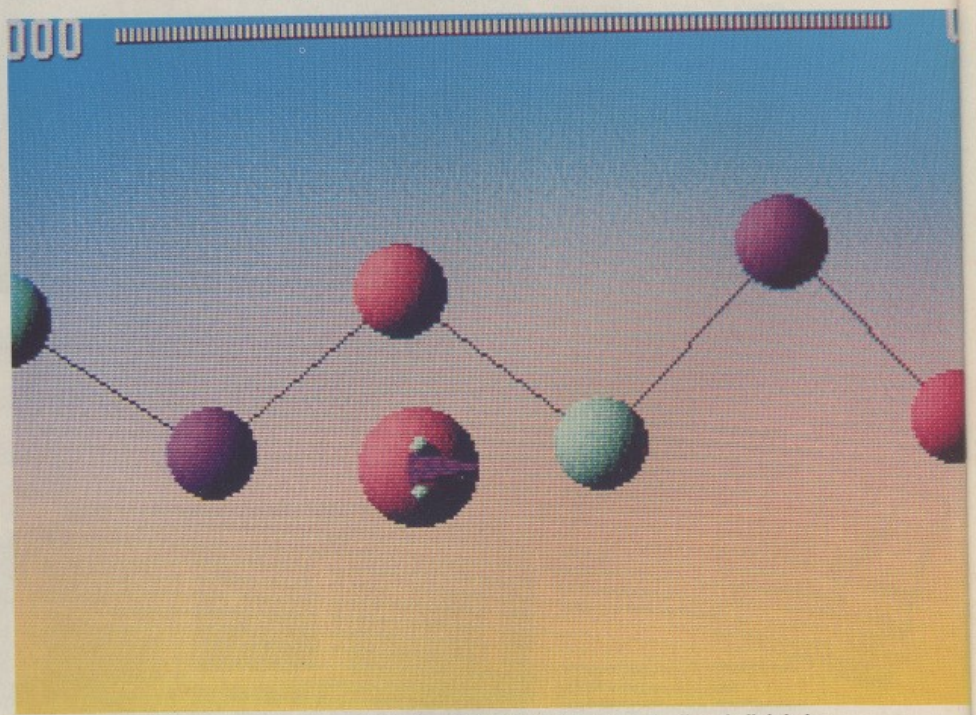
The player takes control of a spherical *Asteroids*-style spaceship, which is rotated by use of left/right joystick movements and thrusted forwards by pressing 'Fire' – but any resemblance to other computer games begins and ends there.

Although most of the screen backgrounds differ in some way, the object is always the same: to get rid of the coloured spherical cells – and fast! By manoeuvring the craft about the screen, it's possible to bump two cells of the same colour together, thus making them disappear. Simple, eh? Don't you believe it.

Allowing two conflicting colours to touch creates a small pod of another colour (for example, a collision between red and blue could cause the appearance of a smaller green pod), which is something of a double-edged sword. Collect this new pod quickly and it tops up your energy level (shown at the top of the screen), leave it for too long however, and it grows into a new full-sized cell. Now, just to make life even more difficult, you can't get rid of this new arrival unless you deliberately create another cell of the same colour for it to collide with.

Worse still, time's also against you. The unstable cells constantly pulsate, throbbing faster and faster until they reach critical mass and explode causing severe energy loss. You may have enough stored energy to survive a complete meltdown, but as any more than three exploding cells is enough to completely drain a full supply, it's best to keep yourself topped up by creating and collecting energy pods.

Fancy a further challenge? Well you've got it, as the going gets even more complicated on certain screens when the cells (and – in two-player mode – occasionally the ships themselves!) are connected by elasticated 'cords'. Moving one cell creates a chain reaction whereby everything connected to it follows, with the force of inertia often causing things to fly about wildly.



THE TENSION IS OCCASIONALLY relieved slightly by the appearance of inter-level bonus sections. The object here is to collect the point-providing blue pods: do this, and one of the pointless yellow pods randomly turns to blue for the task to continue. Later levels see you collecting one pod to make another appear elsewhere on the screen, while others feature 'bad' pods which end the level prematurely. And of course in all cases there's a strict time limit.

CONTROLS

Joystick Left – Rotates the ship to its left
Joystick Right – Rotates the ship to its right
Fire – Thrusts the ship in the direction that it's facing
Joystick Down – Performs a quick 'about face'
P – Pause

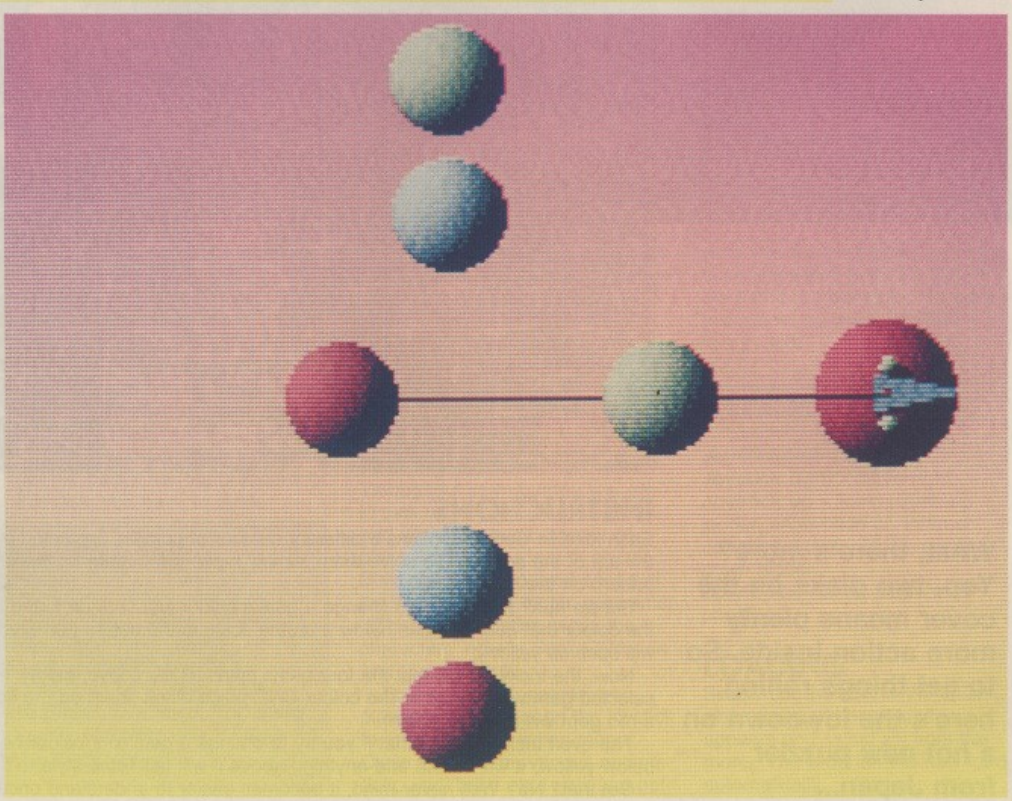
VOLUME ONE

OTION

Here's what we said way back when...

"There's a fine line between abstract and obscure – and *E.Motion* sits very comfortably on it. It's one of the more bizarre games yet seen, but not in terms of gameplay – that's different alright, but it's still pretty clear cut. What's really weird is the atmosphere generated by the unique graphics and sound. Visually, everything's perfectly simplistic – there's nothing on screen that isn't needed, and the use of lurid colour creates a feel of an unreal 'fourth dimension'. The sound is more atmospheric still – the music is very New Age, but it's the in-game effects that really do the job: each effect is a musical note, so it's not uncommon to hear accidental tunes during play. And to add to the abstract feel, an extra life is accompanied by a spooky organ fanfare. E.Motion's a work of genius in the gameplay stakes – well up in the *Tetris* league. It's all down to a fine blend of manual and mental dexterity, and some of the screens are so fiendishly designed that they seem impossible – until you accidentally stumble on the way to do it and it all suddenly seems easy. Until the next screen... It's tough – sometimes taking you to the brink of frustration, but never tipping you over it. Simply un-ball-ievable!

In two-player mode it's vital that you work together with your buddy. Most of the time you can work independently of one another, but problems arise on certain screens when you're joined together by elastic! To make matters worse, on some levels both ships are the same colour, making it quite difficult to tell who's who!



LOADING, PROBLEMS AND FAULTY DISKS

Loading *E.Motion* couldn't be easier. Simply insert the disk into the internal disk drive and turn on the power. The game will now load and run automatically.

Should you find, however, that your game will not load, remove all extraneous external peripherals (printers, extra disk drives and so on) and try again. If the disk still refuses to load, then it's probably faulty – in which case, simply pop it into a jiffy bag or padded envelope and send it, along with your full name and address, to: **The One E.Motion Replacements, T.I.B. plc, T.I.B. House, 11 Edward Street, Bradford, Yorkshire BD4 7BH**. Please allow 28 days for delivery.

THE DISK —

GEM'X

What, there's more? Yep, two disks on the cover means plenty more action inside. So to get things rolling, here's the lowdown on a hot new puzzler from Japan...

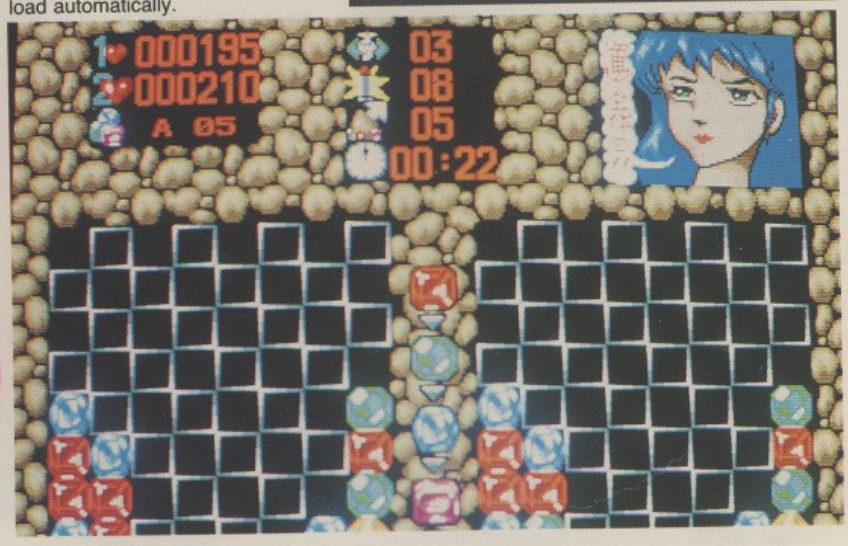
DIAMONDS ARE A GIRL'S BEST FRIEND, or so they say, and when Kiki is the girl, who's going to argue? Kiki is the star of Japanese programming team Kaiko's first game on these shores and *The One* is bringing you a completely playable preview of this brain-busting puzzler. How's that for service?

What do you get? Well, a complete level of gem-colouring puzzles await you (a few of which are especially created for The One and won't appear in the final game!!) along with the sampled sounds of Kiki and her friends.

The full game will contain over 400 levels with an *OutRun*-style choose-your-route screen at the end of each allowing for plenty of variety every time you play.

LOADING

Simply put the disk in the drive when the Workbench screen appears and select Gem'X from the menu. The program will now load automatically.



INSTRUCTIONS

Each level in *Gem'X* contains a different number of puzzles (indicated by the number at the top of the screen). To solve them, simply make the pattern on the left match the pattern on the right.

Simple huh? Not quite. To change a gem's colour just click on it and it will change into the colour that is two places below it on the scale in the centre (for example, a blue gem will become yellow).

Now, the tricky part is that the four gems immediately above, below, left and right of the selected gem will change to the colour ONE place below them on the scale (for example, a red gem will become green).

The even trickier part is that if you try to change a gem to a colour below the scale (i.e. below yellow) it will vanish and anything above it will fall *Tetris*-style to fill the space.

Got that? No? Well never mind, it becomes easier to understand once you start to play.

VOLUME TWO

ELF

The final offering of the month (my, what a lot you got!) is none other than the thrilling adventures of Ocean's person-of-diminutive-stature. Get down...

IT'S THE AGE OLD STORY. Boy Elf meets Girl Elf. Boy Elf falls in love with Girl Elf. Girl Elf is kidnapped by an evil gang so Boy Elf sets out on a mission of vengeance to rescue his beloved. A sort of *Double Dragon* meets the Diddy Men.

So what do you have to do to get her back? For the purposes of this disk, you have to battle through a selection of rooms from Level 1 (the final game will feature six levels with an average of 100 rooms in each!), pitting your wits against all manner of enemies from Goblins to Ladybirds (hey, these are some seriously bad little bugs you know).

INSTRUCTIONS

Throughout your journey you get to pick up all manner of objects and use them in all manner of places with all manner of people. Buildings (in the loosest sense of the word) include Indian wigwams, WCs and campsites, while the characters include Senile Wizards and Hungry Birds.

To interact with people and places just push up on the joystick to enter the 'interaction menu'. Cycle through the various options (talk, use, bribe etc.) until you get what you want. Logical use of the objects reveals clues for later in the game, for example, the seed might best be used with the hungry bird.

The rest of the controls are simplicity itself:

Joystick left - Move left
Joystick right - Move right
Joystick up - Jump, climb up ladder, enter shop or 'interact'
Joystick down - Duck, climb down ladder
Space bar - Enter interaction panel

LOADING

Simply put the disk in the drive when the workbench screen appears and select Elf from the menu. The program will now load automatically.

LOADING PROBLEMS AND FAULTY DISKS

If you should experience any loading problems with your disk simply pop it into a jiffy bag or padded envelope and send it to: **The One Elf/Gem'X Replacements, T.I.B. plc, T.I.B. House, 11 Edward Street, Bradford, Yorkshire BD4 7BH**. Please allow approximately 28 days for your replacement to arrive.

3D CONSTRUCTION KIT™

BUILD YOUR OWN VIRTUAL REALITY

It's a simple, effective way to design a detailed environment (house, garden, village, ship, car etc. etc.) and then look around it to make sure you like the look of it from every angle.

There are environments through environments. For instance, the house has rooms, the rooms have furniture, a chest of drawers has compartments, the compartments have secret boxes, the boxes have ..... etc. etc.

It's up to you. The limit is your imagination. Use it for school – or to show Mum how to re-arrange the living room. Dad might be interested in how the garden would look if it were laid out differently – with a new pool? And how would the neighbours see it from their angle? It's easy! Just spin it round!

This is probably one of the most expensive pieces of software you'll buy this year – but *at last* you can make your computer really show it's potential.

"There's no doubt about it, this could be the most impressive game creation utility ever released.

Not only does it allow you to create run-time modules complete with animation, shoot-em-up compatibility, puzzle solving, and maze exploration – but it enables you to do it in solid 3D, using a system that's even better than Freescape!"

ACE - FEB 91

"3D Construction Kit gives newcomers and non-programmers the power to create solid 3D objects that can be stretched, rotated, suspended, stacked and even given animation effects. Yet the whole system is so user-friendly that it makes most simple art packages look cumbersome."

ST FORMAT - FEB 91

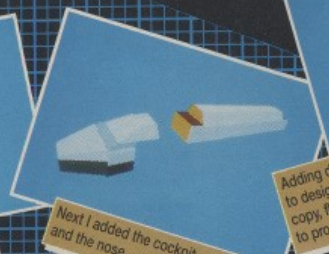
"Build your own virtual reality, but don't be misled. This is **not** a boffins only product. I've produced a special video included in the pack which shows you how to do it – and helps get you off to a flying start. After that it's simple and in no time you'll be impressing everyone with 'magical' designs on your computer!"

CU AMIGA - FEBRUARY

PIERRE TAYLOR (28) – PORTSMOUTH.

I own a car company, but my real love has always been the idea of space travel. I've often played around with art packages but what I really wanted to do was to design a spacecraft once, then bring it to life and walk around it. This incredible package allows someone like me, who knows very little about computers, to do it easily!

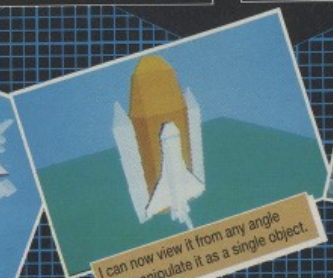
First I put together a couple of blocks to make the fuselage.



Next I added the cockpit and the nose.

Adding detail was easy. I only needed to design one wing, then used the copy, flip and rotate feature to produce the other one.

I added the fuel tank and boosters.

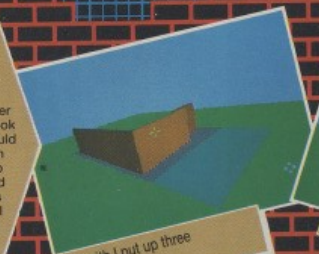


I can now view it from any angle and manipulate it as a single object.

This is a head on view, showing the control panel which enabled me to do it. Not bad eh? Pretty good for a beginner.

PAUL BUCHANAN (22) – EALING – TRANSPORT ECONOMIST.

I've always wanted to design my own house, but I could never really visualise what it would look like once it was built. What would it look like from above? Or from the side? Or what if I wanted to walk through the front door and arrange the furniture? With this marvellous software package, I can do all the things and make my dream house come true.



To start with I put up three simple walls.

Then I made a roof and lowered it down.

I added windows, a picket fence and the first tree in my garden. But the interesting bit was yet to come...

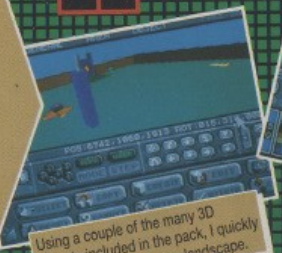
Walking in through the front door, I could see what the rooms would look like.

And using the simple control panel, I could design the furniture and move it around.

Home, sweet home!

CHRIS HALL (15) – STUDENT – YORKSHIRE.

I loved Castle Master and wanted to make a similar game myself. I had plenty of ideas but no way of bringing them to life. After all I'm not a programmer.



Using a couple of the many 3D objects included in the pack, I quickly designed my own game landscape.

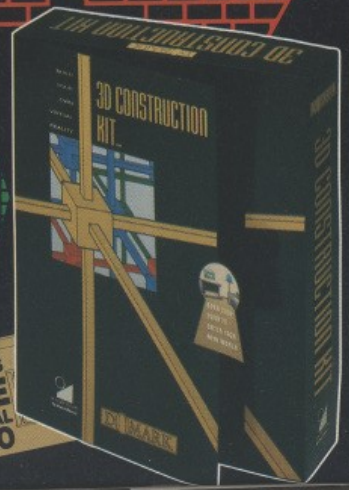
I wanted to give the game a particular style. This was easily done by using the excellent colouring and shading facilities.

Then I set up some of the conditions which could make the game truly interactive.

Using the simple pull down menus and on screen prompts designing a great game was a doddle – I could even have strength and time bars!

Finally, I dropped in a control panel from several included (although I could have made up my own).

I've sent the finished game to my cousin in Wales. He hasn't got 3D Construction Kit yet ... I reckon it won't be long before he gets a copy.



Coming soon: The Incentive Story – 4 award winning Incentive 3D games in one pack!

INCLUDES FREE TUTORIAL VIDEO

incentive
The Award Winners

Available on
Amiga, Atari ST, IBM PC 3.5" & 5.25", Commodore 64 (cassette, disk)
Amstrad (cassette, disk) Spectrum +3, Spectrum 48/128.

Amiga Screenshots Designed and Programmed by Incentive Software

© 1991 New Dimension International Ltd.
Artwork and packaging © 1991 Domark Software Ltd.,
Ferry House, 51-57 Lacy Road, London SW15 1PR. Tel: (081) 780 2224.

DOMARK

NEXT MONTH

THE ADVENTURES OF THORAG STERNHAMMER

Thorag Sternhammer looked at the bridge before him. It was in rotten shape, bits of wood falling away every time someone merely breathed in it's direction. He had to cross it, his destination lay on the other side. Thorag dismounted from his horse and sat down beneath a large oak tree. What was he afraid of? He'd stood his ground against hordes of barbarians before, braved the fiery pits of the underground lairs, he'd even risked his life with the Undead Zombies of Ulm, no one had ever done that before. So what was his problem?

He was afraid of heights. Silly, but true. The world's most ferocious warrior was afraid of heights. It was at least three thousand feet to the bottom of chasm and the fact that the bridge kept falling apart every time he looked at it didn't help. Yet the prize that lay beyond...

He was being childish. Standing up quickly he tied his horse to the tree, checked the contents of his pouch and put a foot on the first wooden plank. The bridge creaked its annoyance, causing the sweat on Thorag's brow to double. He put his other foot on the next plank. The bridge wobbled slightly but soon steadied itself. Thorag let out a sigh of relief.

Perhaps this wouldn't be so bad, he thought, as he clung to the ropes on either side. He continued to walk and with every step the bridge became more fragile. He looked down, his first mistake. The bottom of the chasm seemed to zoom up to him screaming "Come and join me". His grip tightened around the ropes as he forced his gaze away from the drop below and onto his destination.

Without warning a bolt of blue light shot out of nowhere, filling his mind with strange thoughts. Flying boxes of metal exploding in the sky, weird alien creatures, futuristic technology, two square pieces of plastic. He shook his head and quickly carried on.

A snap from behind caused him to turn his head. The ropes had snapped! Any second now the rest of the bridge would go with it. Thorag hurled himself at the far end of the bridge as the bridge swung away beneath him. His hand grasped a stray piece of rope and he held on for his life as it swung him into the cliff face. The wind rushed out of him as he collided with it but somehow he hung on.

He started to haul himself up the rope and clambered onto the grass at the top. He rolled onto his back, let out another breath of relief and sat there looking at the sky. A shadow passed over him, growing larger and more menacing. Thorag tensed and looked at the large, dark figure striding towards him. His hand reached for his sword, only to find it gone. It must have slipped out of its sheath on the bridge. Damn. The figure loomed closer and opened it's mouth.

"Sorry, we're sold out," it boomed, "Why don't you try subscribing to The One, it would make life a lot easier." The shopkeeper turned back leaving Thorag to his rage.

THE ONE MAGAZINE - FOR ALL THE LATEST NEWS ON THE LATEST GAMES - ON SALE MAY 26TH

Artwork and packaging © 1991 Domark Software Ltd. Ferry House, 51-57 Lacy Road, London SW15 1PR. Tel: (081) 780 2224.

GAMES FOR HIRE?

LETTER OF THE MONTH

Dear The One,

When buying computer games I look through the reviews etc. and then go and take a look at the one that I want at my local retailer, but sometimes this is not enough.

Most games have an instant appeal factor which may look good for the few minutes of playing in the shop, but after a few hours at home disappears leaving you feeling a bit cheated.

Would it be feasible to have a computer hire shop which operates like a video hire shop, hiring out games for the night? That way you could really see the depth of the game and whether you will be getting your £25 worth.

I'm sure some of the other readers have had the same problem as I have when buying computer games. Can they suggest any other ways of seeing games to their full capabilities, as many shops disapprove of buyers spending hours on a game before buying or not buying it.

Simon Romans,
High Wycombe,
Bucks.

There are a number of problems connected with the hiring and lending of computer games, but by far the biggest is the question of royalty payments to software authors. Book lending libraries are able to operate because of something called the 'Public Lending Agreement' - a Government-administered fund which pays royalties to authors depending on the amount of times their books are borrowed. In order for software libraries to become viable, a similar system would have to be introduced to compensate programmers.

VIRTUALLY HERE

Dear The One,

At last! In the past two months I have noticed an increase in the coverage of computer-related entertainment on TV. There was an item on *News At Ten* about the new Virtual Reality (VR) arcade machines and *Q.E.D.*'s excellent Granny's Greatest Thrill, featuring VR and military simulators (re-dressing the balance after their last 'shock' report into computer game addiction).

Other readers may also have noticed reports on *Tomorrow's World* about a keyboard and music package running on the NES and a demonstration of Roland's new 3D Sound including *Xenon 2* on CDTV.

Perhaps the best news of all though is a new VR game show hosted by *Red Dwarf*'s Craig Charles, due to begin soon on ITV. I believe the show will feature players kitted out in full VR suits and the viewer will see the computer-generated action rather than the human contestants.

Such coverage can only help to lift computer entertainment out of its unfortunate and undeserved 'cult' classification and encourage people to invest in VR when it becomes available for the home. This can only be good news for long-suffering games players like myself, as generally an increased user base means lower prices.

A vote of thanks must go to your magazine for your coverage of topics like VR and CD which the TV companies seem to be catching up with. It would seem that the critics who complain about coverage of unaffordable and/or unavailable hardware are about to be silenced. CD and VR are on the way to the home sooner than they think and I for one can't wait.

Stephen J. Richardson,
Whitley Bay,
Tyne and Wear

The forthcoming CD and VR products are exciting to say the least. Unfortunately, despite all the media coverage given to the games aspect, VR is still some way from being the next games medium. The companies that are investing in VR technology are still researching more 'practical' uses such as training military and commercial pilots, training military and police forces in the use of firearms and, naturally, the medical possibilities. Imagine a surgeon being able to travel through a VR simulation of a human body. Of course, as soon as a games freak with the VR technical know-how comes along and produces the first commercially available VR game, there's going to be no turning back. By the way, for more about the VR gameshow that you've just mentioned turn to our feature on page 28.

SOCCER SOUNDS

Dear The One,

Kick Off is just about perfect now but the game is lacking sound.

So how about Anco bringing out a sounds disk? They could go to different football matches to find out the different songs sung and get them down on disk. Also you could have claps when the 'keeper makes a save, a permanent crowd noise rising when a team breaks or someone goes on a run and booing people. Also whistling near the end of a match would be effective.

Another thing that would change the game would be different nets on the goals. A soggy net that flew backwards when the ball went in the back of it. With some neat graphical touches they could take away the boards behind the goals and put in a close-up stand (terrace), so that when people score you see the crowd go mad.

In *Final Whistle*, the players jump on the scorer when a goal is scored - instead of that players should run into the corner where the crowd is cheering and celebrate.

My friends and I realise that this would take some brilliance but we believe Dino and company can do it. Come on Anco, hurry up with *Kick Off 3* (please).

Paul Beevis,
Thorpe End,
Norwich

FOOTBALL FROLICS

Dear The One,

Recently a friend came around to my place to play *Kick Off 2* because he hadn't seen it, so I left him to play it while I had my tea.

When I came back he was very upset and said that the game was a load of rubbish and that he only had three players compared to the opposition's 22 and that his team didn't show any interest in playing football and hadn't once kicked the ball and were hardly ever seen on screen.

We both had a good laugh about the whole thing when I pointed out that his so called 'team' were actually the referee and the two linesmen.

Mark Watson,
Lea,
Preston

Lucky you both saw the funny side, eh? Do any other readers have amusing 'computer mistake' stories? If so, send them in to us and we may send you a prize (then again, we may not).

GOOD TO BE GREEN

Dear The One,

I feel I must write to you to express my views on a certain subject - the packaging of games. Are the large boxes which games are being packed in really

necessary or are they just there to publicise and promote the games along the lines of 'big is best'?

In this time when we should be addressing the cost to the environment of the waste which the public consume each day, it cannot be acceptable to the majority of the games-buying public to allow software companies to parcel up games in large boxes, just to promote them as being gigantic.

Some software houses do use big boxes because their products require them (Lucasfilm with *Battle Of Britain*, for example), but surely it's not necessary in every case.

Martin Power,
Rotherham,
South Yorkshire

THE END IS NIGH

Dear The One,

I'd like to comment on two letters printed in the April issue. I sort of agree with Derek Richardson's opinion about end sequences. The two games I've managed to complete were ridiculous under this point of view. But playing them was very enjoyable!

However, I can't see a point in not buying games from companies who don't code great end sequences. Maybe it's because I'm not one of the great gamblers who complete a game in short periods. The main thing for me is addictiveness!

Another of your letter writers, D. Roher, is the coolest dude I've ever heard of: "Do I break the law by owning illegal copies?" Do you break the law by owning stolen money? But he wrote one thing that puzzles me. Do British crackers really mention their address and phone number in their intros? Are they mad? Why don't they just queue in front of the jail?

Thomas Adams,
Solingen 1,
Germany.

MONEY FOR NOTHING?

Dear The One,

There's a lot of talk, mostly from software publishers, about the amount of money lost each year through software piracy.

Now, while I don't want to condone piracy in any shape or form, I believe that software houses do nothing to help themselves by tackling the problem in the wrong way.

Many parallels can be drawn between the software industry and the music industry. For one, both are plagued with 'professional pirates' who are making easy money off someone else's hard work. But piracy has been around in the music industry for far longer and even with the larger finances available to combat piracy, record companies are still no nearer to defeating the 'bootleggers' than 10 or 20 years ago.

The unfortunate fact is, that while you may catch the odd syndicate of pirates, many more are still able to continue to operate unabated. The reason for this is clear, they can offer a product available in the shop for far less (visit Cyprus and you can buy Arnie's latest film for the cost of a tape).

It is in this area that software companies can help both themselves and ordinary Joe Public. If you look at the average price of a Top Twenty game, you can expect to pay between £25-30. If you compare that to the price of a Top Twenty CD, then the price is less than half that, around £12.

How can software companies justify charging this extortionate amount? Especially when they know that the majority of software is purchased by the 15-25 year old age bracket, the bracket with the least amount of money to spend. It's no wonder people are tempted to buy a copied version for a fraction of the price.

So come on software houses, give us, the real victims, a break. It's getting really hard to tell who the REAL pirates are now!!

Aiden Kearns,
Gatow,
Germany

Dear The One,

I read with interest, in both yours and other magazines, the continuing debate on piracy. I would like to air some of my views.

Accepting the fact that piracy is morally wrong, I disagree with the so-called do-gooders, that nobody should touch it because it is implied that this in turn pushes up the price of software for the rest of the public.

Well, firstly may I say that without encountering these pirate copies of software, I would not have bought several of the games that I now own.Which brings me to my second point, the cost of the software itself. Everybody, including yourself, justifies the high prices due to programming the games, production and packaging costs (plus an attempt to counter piracy itself). Well I can go with the programming costs but as for production costs, sorry but no. How can the software companies justify the £20-30 price tag for 16-bit games, when they can sell off the same game on a different format for around £10?

Now you can't tell me that the cost of disks has anything to do with it. After all, your magazine advertises blank disks for around 40p, when I suspect that tapes would cost the same, if not more. As for piracy, well I don't honestly believe that any society will ever banish it, be it software, music or video.

Paul Jones,
Address Withheld

MORE SPEED PLEASE

Dear The One,

Can I please use the good offices of your magazine as a way of contacting the Bitmap Brothers. This letter is specifically meant for them to read, but it would be interesting to see other readers' views on the subject.

The first thing that I would like to do is thank the Bitmaps for producing the greatest, most playable game ever (move over Dino Dini) - I am of course referring to *Speedball 2*. I have spent countless hours battling with the best that the computer could throw at me (as my poor neglected wife will confirm).

My main reason for writing this is to ask the Bitmaps to consider (if they haven't already done so) bringing out a data disk or disks (as Anco are doing with Kick Off 2) to make this superb game even better.

As a two-player game it needs nothing really adding to it, however in the one player mode it has one or two limitations which detract from the game's long-term lastability, the main one

being the fact that the game comes to an end after a maximum of two seasons when in the league option. It lacks the continuity needed for the long-term enjoyment.

One or two of the ideas that I have come up with are only minor additions, but at the same time are things that I think would enhance the overall atmosphere of the game. Things like the addition of individual team colours (similar to the kit design option in Kick Off 2) and individual team insignia. The insignia of the home team could be displayed on the floor of the arena, around the centre line (as they do in American football) to give a real home and away match feel. Also, teams playing at home could be programmed to slightly raise their game and thus be stronger than when they play away matches, so aiding home advantage.

As I have already said, these are just minor changes, the biggest addition that I (and I am sure many others as well) would like to see is an expanded league system to enable the game to be ongoing, thus enabling you to keep your team of carefully nurtured players together through thick and thin. The format could copy that of the football league, with four divisions and include promotions, relegations and cup competitions at various times throughout the season. The transfer market could be expanded to allow star players to be available to all teams, so that over a period of time teams like Revolver and Raw Messiahs could improve rather than just being the league jokers year after year.

I am sure that the Bitmap Brothers could come up with other and probably better ideas than these and other readers could add their own thoughts. I started thinking about all this just after I had played 28 games in a row (allowing for the odd break) and had won both the second and first division titles, thereby ending the game. So my team of superstars were to be disbanded and I would have to start again from scratch next time. This is fine for a couple of times, but it soon starts to get annoying having to start again in the second division where the game speed is so slow compared to the first division and you have to go about buying the same old star players.

Having read this last bit back to myself it sounds as though I am knocking the game, but that is the last thing I want to do. As I said at the beginning of the letter, Speedball 2 is in my opinion the best game ever and I am just looking for ways to increase its longevity.

I hope that Eric Matthews from the Bitmap agrees with at least some of my comments (I believe that he was the guiding light behind the project) and can see the possibilities.

Robert Kirk,
Thorneywood,
Nottingham

Over to you Bitmaps...

SERGEANT SOFTWARE

Strong of arm, wise with words and generous with games, everyone's famous N.C.O. continues in his quest to bring software to the needy. If you think you fit into that category, send your begging letters to: Sgt. Software, The One, EMAP Images, Priory Court, 30-32 Farringdon Lane, London EC1R 3AU.

Dear Sarge,
I am an ugly-looking schoolboy with no money. Things are so bad that when I go around to the shop for my favourite magazine I get picked on and everybody laughs at me. So now I'm going to stay in my room for the rest of my life - please send me some games to keep me company.
Wayne H.,
Tamworth,
Staffordshire.

Believe me, Wayne, I sympathise completely with your plight for, although it may now be almost impossible to believe, I too was once an ugly teenager. However I'm not sending you any software as the answer to your problems is not to sit in your bedroom sulking - get out there into the real world and revel in your ugliness. You never know, one day you may grow up to be a glorious hunk of manhood just like me.

Dear Sarge,
I was once a very happy computer with a caring owner. But now I think that he has another - a small human, a girl I think, who goes by the name of 'daughter'. If I could send him a gift of my own, to show how much I cared for him, it might help make him see who his true love really is. You're my last hope.
Anne Onymous
(True love of Wayne Morledge),
Derby.

Just face facts Anne, you've lost that loving feeling, now it's gone, gone, gone... (don't worry though, Wayne's daughter will be grown up in about 16 years and then you can get back together).

Dear Sarge,
My mentally handicapped son John is 15 years old and very fond of his computer which he won from a magazine. As my wife and I are both unemployed (and living with my mother), we are unable to buy games. The computer is John's only decent possession, so we would be very grateful if you could offer a small amount of software to him as a surprise from us.
S. Mooney,
Liverpool,
Merseyside.

Your tale has warmed even the coldest cockles of my heart. £100 worth of software will be on its way to you in the very near future.

Dear Sarge,
One day my brother went to Margate. While he was away, I decided to play on his computer - I shoved in a disk but it didn't work so I reset it and then put in a few more disks, but nothing worked. When my brother got home, I told him what happened. He tried them out and said angrily: "You've put a Virus on every disk.". He looked as though he was going to hit me, so I pulled at his T-shirt for mercy - but I ripped it. He said: "You have one month to get me £100 worth of software and a T-shirt." Help!
Lee Burlingham,
Welwyn Garden City,
Hertfordshire.

Sorry Lee, but you've made your bed so you can lie on it. Your brother may seem harsh, but to be perfectly honest if you'd ruined my software collection (which you couldn't because it's so vast) I'd have probably done exactly the same.

The One's offices are located just across the road from *The Guardian 's* building - which may be the reason why we received the following letter which was actually meant for that paper's 'note and queries' section...
"Has anyone ever calculated the area that would be covered if every single person on the planet were to stand shoulder to shoulder in one place?"
Does anyone out there know the answer - and, more to the point, does anyone really care? If you *do* know, keep it to yourself you boring git!

BRAT™

THE ANTI CUTE STRIKES BACK!

HE'LL BE LOOKING FOR TROUBLE ON YOUR AMIGA AND ST.

IMAGE WORKS IRWIN HOUSE 118 SOUTHWARK STREET LONDON SE1 0SW

TEL: 071 928 1454 FAX: 071 583 3494

iMAGE WORKS

THE DEFINITIVE DEATH RACE

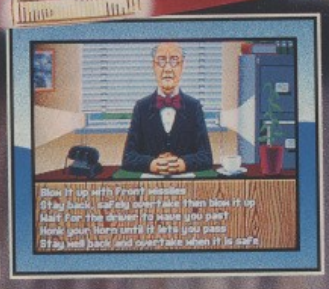
SUPERCARS II

...THE NIGHTMARE CONTINUES...

...Prepare to recommence motorised combat and do battle in the most brutal race of all. With a 1/2 player option, new weaponry, 20 new tracks including bridges and ramps to be jumped and improved graphics, Supercars 2 promises to be an even greater smash than the original Supercars.

Screen shots from Amiga format.

Produced by Magnetic Fields



EXPLOSIVE ACTION

FROM THE CREATORS OF LOTUS ESPRIT TURBO CHALLENGE

Available on:
AMIGA & ATARI ST/STE

GREMLIN®

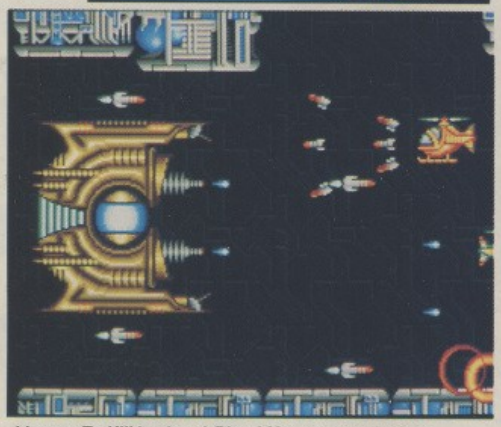
Gremlin Graphics Software Ltd,
Carver House, 2-4 Carver Street,
Sheffield S1 4FS Tel: (0742) 753423

TWO MORE FOR BUDGET

GOOD NEWS FOR THOSE OF YOU ON THE LOOKOUT for a few cut-price classics (that's just about everyone, isn't it?). Not ones to be left out when there's a bandwagon going around, both Domark and Psygnosis are planning to re-release some of their bulging back catalogues on two all-new budget labels.

Domark's little one has been christened Respray and is expected to churn out two new titles each month, starting from April. Top of the list are the slick *Licence To Kill* and the classic *Hard Drivin'*. If you want them, all you have to do is hand over £7.99.

The first releases due out on Psygnosis' label, Sizzlers, include *Baal*, *Ballistix*, *Blood Money* and the excellent *Infestation*. A definite price point had yet to be decided for these as *The One* went to press, but chances are that you'll be able to get your grubby mitts on those games you missed first time around in exchange for a wad no bigger than a tenner.



Licence To Kill **(top) and** ***Blood Money*****: more for less.**

TOP TEN MAY 1991

1	▲	**LEMMINGS**	Psygnosis
2	NE	**TURRICAN 2**	Rainbow Arts
3	▼	**SPEEDBALL 2**	Image Works
4	NE	**SWIV**	Storm
5	▲	**FANTASY WORLD DIZZY**	Code Masters
6	NE	**R-TYPE**	Hit Squad
7	▼	**THE FINAL WHISTLE**	Anco
8	NE	**LITTLE PUFF**	Code Masters
9	▼	**F-19 STEALTH FIGHTER**	MicroProse
10	▲	**A-10 TANK KILLER**	Dynamix

GOGGLE BOX

WHO SAYS THAT A TV HAS TO BE SQUARE? Philips doesn't. With the Discoverer, the Dutch electronics giant is targetting the untapped hip and trendy TV market - the kind of people who want a TV which "looks attractive both on and off." So, if you think you'd be over the moon with a TV shaped like a space-helmet in the corner of your bedroom here's your chance. The Discoverer, complete with detachable black visor, dark glass 14" screen, anthracite remote control and sleep timer is a mere snip at £249.99.

AD&D GOES 3D

HOT ON THE HEELS of *Pool Of Radiance*, *Curse Of The Azure Bonds* and other such SSI classics, comes *Eye Of The Beholder*, the first AD&D 'second edition' computer role-playing game.

The story, set in the Forgotten Realms city of Waterdeep and based on the TSR modules Waterdeep And The North, City System and The Ruins Of Undermountain, deals with the exploits of a group of adventurers assigned to search the metropolis' underground for signs of a criminal mastermind.

There are six different races and character classes to choose from and the escapade takes place inside a 3D environment complete with a new *Dungeon Master*-style point-and-click interface. Eye Of The Beholder is available now at a price of £29.99 - and, believe it or not, its sequel, *Eye Of The Beholder 2*, is already under development.

THE GEAR!

MOVE OVER GAMEBOY, your position as the number one hand-held games machine could be in jeopardy, thanks to a colourful little fellow that's just arrived in from Tokyo.

Virgin Mastertronic - the company that's already brought some of you the MegaDrive - is now going to take its attempts at world domination to the streets with the launch of Sega's latest brainchild, the Game Gear handheld console.

This machine, which has already sold over 1,000,000 units in Japan since its launch three months ago, sports a 3.2" backlit LCD screen (which can display up to 32 colours simultaneously) and pumps out stereo sound through its built-in speakers.

Power is supplied by six LR6 batteries (that's Walkman batteries to the uninitiated) , which will be initially gobbled up by a range of software which includes *Super Monaco G.P.*, *Columns*, *Mickey Mouse*, *G-Loc*, *Wonderboy*, *Dragon Crystal*, *Shinobi*, *Golden Axe* and *Pengo*.

A number of optional extras will become available over the months following the machine's initial launch, including stereo link-up cables, car cigarette lighter adapter link cables and so on - but what makes the Game Gear unique among its peers is its ability to convert into a colour TV by the addition of a TV tuner module which should also be available later this year.

Virgin intends to get the Game Gear into the shops by early Summer, with the standalone machine setting you back just a penny short of a 'ton' - and hopes to shift at least 100,000 of them before the end of the year. But if you don't fancy spending £99.99, and want to be the first kid on your block to have 32 colours to play around with, then why not enter our simple competition?

All you have to do is answer the following question: Pop the answer on the back of a postcard and send it to **Get The Gear, The One, EMAP Images, Priory Court, 30-32 Farringdon Lane, London EC1R 3AU**. Entries will be accepted right up until the close of play on May 9th 1991.

FIVE GO BINARY

"IT'S A LOVELY DAY, HURRAH!" CRIED JULIAN, leaping out of bed. "I don't know why, but it always seems very important that it should be sunny on the first day of a holiday. Let's wake Anne."

Marvelling at the beauties of the English countryside, munching chocolate at midnight and drinking lashings of ginger beer - all these pleasures and plenty more are yours for the asking thanks to the first ever computerised version of Enid Blyton's Famous Five.

Yes folks, courtesy of Enigma Variations, those wholesome, hearty kids are back. Julian, Dick, George, Anne (and Timmy the dog) are embroiled in their debut digital adventure - so it's lucky they wore their rubber-soled shoes.

In *Five On A Treasure Island* you too can enjoy the thrills and spills of action, adventure and twee holiday fun. You can play any member of the famous fivesome, from George the ridiculous tomboy to Timmy the almost-human dog.

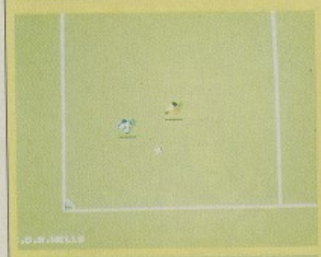
The whole shebang has been authorised by the Blyton Estate and should be available from all reputable software shops now.

THE GOAL-DEN SHOT

The Kick Off 2 Golden Goal Of The Month PRESENTED BY THE ONE MAGAZINE AND ANCO THE KICK OFF 2 GOLDEN GOAL CHAMPIONSHIPS

THIS MONTH SEES YET ANOTHER FIRST for the Golden Goals competition - our first ever international winner! Yup, all the way from Sweden, home of Arsenal's overly-dramatic Anders Limpar, comes Robert Halvarsson and an effort that would make even Tottenham's glorious but deadly striker Gary Lineker proud. Robert is the first (but we hope not last) international player to make it into the Kick Off 2 Championships. How did he get there? Like this...

TAKING THE BALL NEATLY from the feet of his opponent during a tough centre-circle battle, , Robert's number four breaks free and lays in a long floating pass towards the corner flag.



TIMING HIS RUN to perfection, the fleet-footed winger picks up the pass and turns towards the goal. As he enters the area, a superb turn around the hapless defender leaves him clear to chip in a cross.

THE BALL FLOATS ACROSS the mouth of the goal as the 'keeper dives to cover it. But Robert's Lineker clone has launched himself to make a spectacular flying header - goal!

Do you have a goal that could make even the heroes of White Hart Lane stand up and take notice? If so, send it to **Golden Goals (Kick Off 2 Championships), The One Magazine, Priory Court, 30-32 Farringdon Lane, London EC1R 3AU**. Don't forget the prize is now an entry into the Kick Off 2 Championships and that we only want the best, the very best, anything less just won't do. Unfortunately we are now unable to return disks, even with an SAE, sorry about that!

IGNORE THESE RULES AT YOUR PERIL

FAILURE TO COMPLY with any of these regulations merits instant disqualification.

1) No more than THREE (3) goals per disk and no more than one disk per entrant.

2) All goals MUST be scored by the entrant and NOT by the computer (even in Position play you have to be the one that gets it in the net). We can tell, so don't waste our time.

3) The disk LABEL must contain the following information: the entry's format (Amiga or Atari ST), the entrant's name, address and (if applicable) telephone number. A description of the goals would also be handy, along with what type of pitch they were scored on.

Disney's

DuckTales

THE QUEST FOR GOLD

BIG BUCKS!

EXCITEMENT!

DANGER!

ADVENTURE!

The ultimate challenge has been issued... now, you must race across the globe in search of fortune and glory to become the richest duck in the world!! The adventure will require all your skills and courage

ARE YOU DUCK ENOUGH?

Adapted by:

TITUS

THE BEST VIDEO GAMES

Disney SOFTWARE

Available for Amiga® - PC / PS - Atari® ST - Commodore 64 -

Amiga, Commodore
are registered trademarks.
For more information please call 0268 541 212

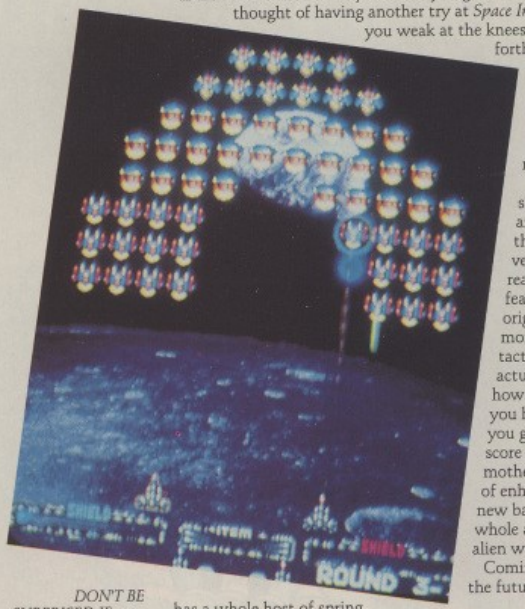
© The Walt Disney Company

THE NEXT ALL-FORMATS COMPUTER FAIR will take place in London's New Horticultural Hall on Saturday May 18th. Tickets and further information can be had from John Riding on (0225) 868100.

ATTACK OF NOSTALGIA

REMEMBER THE OLD DAYS when computers were called Oric and Vic-20 and most arcade machines sported row upon row of little green men?

If that last sentence has just made you go all blubby and the thought of having another try at *Space Invaders* makes you weak at the knees, then Domark's forthcoming licence of the Taito coin-op *Super Space Invaders '91* could provide exactly the right nostalgia trip.



Due to hit the shops some time around September, this updated version of the first real coin-op smash features all of the original's bug-eyed monsters and firing tactics (does anyone actually remember how many invaders you had to kill before you got a maximum score for the mothership?) plus loads of enhanced graphics, new backdrops and a whole array of updated alien wave patterns.

Coming right back to the future, Domark also has a whole host of spring releases up its sleeves. Watch out for 3D speedboat action in *Hydra*, *Thunderjaws* (an undersea extravaganza) and *R.B.I. Baseball*, all due out in the next couple of months.

By the way, we may not know how many invaders you had to shoot, but we do know what R.B.I. stands for... That may sound like a cue for a quick competition - and it is! There's a Domark T-shirt up for grabs to the first reader who drops us a postcard marked **Baseball Bovver** at the usual address letting us know what those initials mean.

DON'T BE SURPRISED IF some of the prices quoted for software in the latest issue seem a little odd. The recent budget's hike in V.A.T. rates has meant that the £24.99 and £19.99 price points may not be with us for very much longer. We'll keep you posted.

FIVE OF THE BEST

STAYING WITH DOMARK, its latest compilation contains five of the best arcade conversions published for a long while, namely the hilarious sci-fi blast *Escape From The Planet Of The Robot Monsters*, the frenetic cops 'n' robbers chase *A.P.B.*, the *Tetris*-rivalling *Klax*, the two-player futuristic tank battler *Vindicators* and the robotic American football sim *Cyberball. The Winning Team* (for that is its name) is available now at £29.99

***Klax*: now just part of a winning team.**

Come on you blues...

OH BROTHER!

MR AND MRS BLUES TWO FAVOURITE SONS, Jake and Elwood, are about to take their 'Mission from God' from the large screen to the small, as Titus has signed up the rights to the John Belushi/Dan Ackroyd classic, *The Blues Brothers*. That's about it as far as details go, except to say that you can expect a release before the end of the year.

VAMP REVAMPED

JUST WHEN YOU THOUGHT THAT YOU'D SEEN THE BACK OF ELVIRA (who'd want to see her back?), MicroValue is all set do for joystick jugglers what Accolade's *Elvira - Mistress Of The Dark* did for adventurers.

An Elvira arcade game is currently being programmed by Flair Software (in conjunction with the adventure game's programmer, Horrorsoft) and features the great witch herself fighting wickedness in tandem with her trusty pink poodle.

Together they battle through three different alien-infested worlds fighting evil, enchanting monsters and battling baddies.

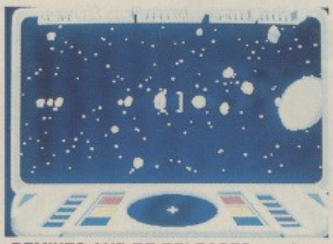
Billed by MicroValue spokesman Colin Courtney as an arcade game with parallax scrolling and Beast-sized graphics, the new Elvira experience is due out in October.

The woman in black - all set for her arcade debut.

WHEN THE CHIMPS ARE DOWN

ELECTRONIC ZOO BECOMES YET ANOTHER PUBLISHER to dip its toe into budget pool, with the announcement of its Monkey Business label. The first four re-releases to bear the monkey's mark will be (appropriately) *Jungle Book*, *Paris-Dakar Rally*, *20,000 Leagues Under The Sea* and *Asterix*, which will set you back £7.99 each and should be

available some time in April. Meanwhile, Electronic Zoo has a fluffy monkey to give away to anyone who can come up with the cleverest, wittiest, and most rib-tickling name for their label's monkey mascot. Send in your suggestions on the back of a postcard remembering to include your complete name and address to Monkey's Uncle, **The One, Emap Images, Priory Court, 30-32 Farringdon Lane, London. EC1R 3AU**, and you too could be playing zoo at home.



REMIXES AND RE-RELEASES aren't just confined to the music biz, as Novagen's latest release demonstrates. *Encounter*, by Paul Woakes (the chap behind *Mercenary* and *Damocles*), is about to make a reappearance dressed up in all-new 16-bit clothes. Make your encounter now - for £20.42.

DESIGN TEAM
Game Design: Sid Meier with Bruce Shelley
Programming: Sid Meier
Graphics: Max Remington III with Michael Haire
Sound Effects: Ken Logace and Jim McConkey

THOSE OF YOU WHO ARE TOO LAZY to unplug your mouse when you want to indulge in a little two-player tomfoolery, may be interested in a new product from Josty UK. The Roboshift is an extension cable which converts one of your computer's joystick ports into a double socket, allowing two joysticks and a mouse to be used simultaneously. For further details, contact Josty on (0642) 769000.

MAKE TRACKS FOR CASH

FOR ALL WOULD-BE ENGINE DRIVERS who just haven't got the cash or the floor-space to splash out on a Hornby, MicroProse's PC simulator *Railroad Tycoon* (reviewed way back in Issue 21) was a dream come true.

And now that dream could be your too, as this superb 'train 'n' transaction' game is about to make an appearance on your computer.

Using a *Sim City* style interface, the game allows you to wheel, deal and build your own railroad in Europe, England or the American East and West coasts.

If you've got what it takes to cope with disaster, fluctuating prices and ruthless competition, you can build up your humble empire from tiny branch-line into huge transcontinental concern. All you need is skill, perseverance - oh, and £29.99.

JUST WHEN YOU THOUGHT THAT joysticks couldn't get any weirder, along comes Spectravideo's Manta Ray to prove you wrong. Heralded as 'probably the most comfortable joystick in the world', the Manta Ray's unusual shape is a product of its supposedly ergonomical design. If you want to test this for yourself, the stick should be available right now, for £12.99.

ON-LINE TIME

CRL IS DEAD, LONG LIVE ON-LINE ENTERTAINMENT. CRL, the veteran London-based publisher finally closed up shop last month after a long and varied career which produced such notable 8-bit fare as *Tau Ceti* and *Jack The Ripper*.

However, this tradition may yet continue, as in true phoenix style, a new company has formed from the ashes - that company is On-Line Entertainment.

The first release from the newly-formed publisher is to be Battle Bound, a scrolling beat 'em up where the hunky hero, Calumn, enters the Temple Of Pain in a search for the all-powerful Golem. You guessed it, this results in three-levels of hacking, slashing and animated mayhem.

To promote this release, On-Line is offering one lucky reader of *The One* a chance to pick up the flashy axe pendant shown here - it's so sharp it'll probably take your head off.

To be in with a chance to pick up this enviable prize, just answer the following simple question: What weapon does *White Dwarf*'s character Thrud the Barbarian use to slaughter his victims?

Pop the answer on the back of a postcard (or sealed envelope) and send it along with your name and address to: **Bound To Win, The One, EMAP Images, Priory Court, 30-32 Farringdon Lane, London EC1R 3AU** to arrive no later than May 9th 1991.

NERS...WINNERS...WINN

IN ISSUE 30, STORM'S *SWIV* COMPETITION offered one lucky winner the chance to drive away the 'Midnight Pumpkin', a fabulous remote-controlled 1/14th scale customised 1953 Ford F-100 pick-up truck.

However, the three questions we asked proved a little too difficult, as most of you put down *Silkworm* as Storm's first release - the correct answer is, of course, that Storm opened its account with *St Dragon*!

Some of you did get it right though, and the eventual winner, who'll soon be burning rubber all around Norfolk, was... James McGhee of Norwich. Safe driving James.

Also in Issue 30, US Gold offered driving fans a chance to test their skills at a racing school at the famous Silverstone circuit.

This time it was our turn to make a small mistake with the questions: as Chris Gray from the Isle Of Wight pointed out, the first question should have read 'Which famous British sportsman *drove* for Ferrari's Formula 1 racing team?', as Nigel Mansell has now moved to Williams. Thanks for pointing that out to us Chris, but there's no prize on its way to you - as nobody likes a smart-ass.

Huge amounts of you did manage to answer the three questions just the way we liked them, but the one which separated itself from the crowd came from... Martyn Reed of Kenley in Surrey. Congratulations Martyn, if you hold a full licence, you'll be zooming around Silverstone in next to no time.

GOLDEN JOYSTICKS 1991 AWARDS

A JUBILANT ANIL GUPTA (Centre) of Anco collects the award for Game Of The Year from our very own Laurence Scotford (right).

ANDREW WRIGHT (LEFT) of Virgin Games collects Golden Axe's award from Steve James (right), editor of CU Amiga.

ON THURSDAY APRIL 4TH, at the Rooftop Gardens, Kensington, the most prestigious industry awards were held. Everybody who is anybody in the games world was at the event, which was hosted by The One, PC Leisure, ACE, CU Amiga, Sinclair User, Computer + Video Games and Mean Machines. Following the usual industry chat over a drink and a sumptous slap-up feast, the awards were presented by funny man Danny Baker from London's GLR radio station and the editorial staff of Emap Images magazines. So, with hearty congratulations to the winners and commiserations to those who nobly fell by the wayside, here's who you voted for in 1991.

AN EVEN MORE JUBILANT Nick Alexander (second right) of Virgin Mastertronic and Nobuhiko Ishihara (right) of Sega collect the Hardware Manufacturer Of The Year award from Jim Douglas, editor of Ace (left).

OCEAN'S GARY BRACEY (right) collects the prestigious Software House Of The Year award fom Terry Pratt, managing director of Emap Images.

MOMENTS OF TERROR (number 53 in a series of 100): consulting the seating plan to discover that you've been placed next to Laurence Scotford.

GARY BRACEY OF OCEAN (centre) gets cornered by Ian Hetherington (left) and Jonathan Ellis (right), bothof Psygnosis: "So, Ocean have won Software House of the Year again, eh?...."

BEST GRAPHICS

Nominations:	Shadow Of The Beast 2 – Psygnosis Powermonger – Electronic Arts Space Ace – Entertainment International
Winner:	Shadow Of The Beast 2 – Psygnosis

BEST SOUNDTRACK

Nominations:	Speedball 2 – Mirrorsoft Toyota Celica GT Rally – Gremlin Graphics Lotus Turbo Esprit Challenge – Gremlin Graphics
Winner:	Speedball 2 – Mirrorsoft

BEST SIMULATION

Nominations:	F-19 Stealth Fighter – MicroProse F-29 Retaliator – Ocean Kick Off 2 – Anco
Winner:	F-19 Stealth Fighter – Microprose

THE COMPERE, DANNY BAKER, broadcaster, television and radio personality - and the funniest man in the world...

DOMARK'S MARK STRACHAN has a moment of sheer panic when he realises that he can't hold his filofax and the tray of drinks he ordered at the same time.

BEST COIN-OP CONVERSION

Nominations:	Golden Axe – Virgin Games
	Rainbow Islands – Ocean
	Off-Road Racer – Virgin Games
Winner:	Golden Axe – Virgin

GAME OF THE YEAR

Nominations:	Powermonger – Electronic Arts
	Kick Off 2 – Anco
	Golden Axe – Virgin Games
Winner:	Kick Off 2 – Anco

HARDWARE MANUFACTURER OF THE YEAR

Nominations:	Commodore
	Nintendo
	Sega
Winner:	Sega

SOFTWARE HOUSE OF THE YEAR

Nominations:	Ocean
	MicroProse
	Electronic Arts
Winner:	Ocean

THAT WAS THEN.

LET'S GO RIGHT BACK IN TIME NOW, to a time when games were games and It Came From The Desert was just a gleam in Cinemaware's eye. From here on, 'That Was Then...' will be a regular feature, where we look back at what was happening two years ago.

So, believe it or not, this issue we're focusing on Issue 8 - which was launched on an unsuspecting world in May 1989.

The front cover was (and still is) the Ed's favourite, featuring that distinctive blood-stained 'smiley' badge which began life as the cover motif of Alan Moore and Dave Gibbons' brilliant Watchmen graphic novel, only to be briefly adopted by the short-lived acid house 'Summer Of Love'.

And what better way to kick off this look back, then by asking a well-worn question: whatever happened to the Watchmen?

In Issue 8 we announced that the ex-Python animation maestro Terry Gilliam was to start work on a film of the book. The producer was in place (Joel Silver, the man behind Die Hard, Predator and Lethal Weapon among others) the script, by Sam Hamm, was knocking around in 'first draft' form and Gilliam himself was displaying enormous enthusiasm for the project.

So what went wrong?

Details become very, very sketchy at this point, but it appears that after Gilliam's producers had their fingers burned by the massive cost of his Baron Von Munchausen project, they were suddenly (and understandably) a little less willing to put a great deal of cash into his next effort and the tale of contemporary superheroes was put, as they say, 'on ice'.

There is good news though. Gilliam has just finished another film, The Fisher King with Jeff Bridges, and should this be a success then it's possible that the Watchmen could be his next thing.

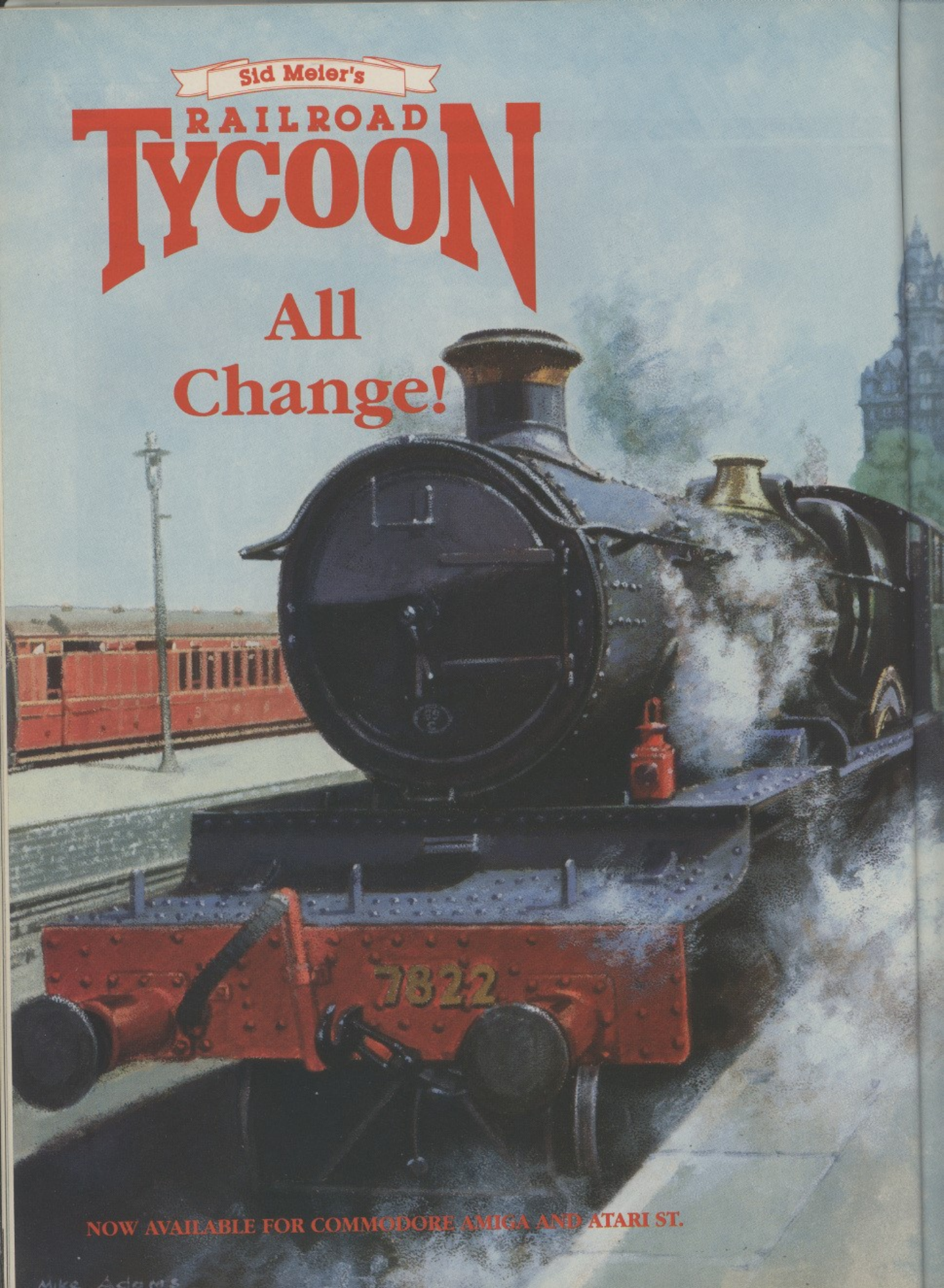
Ocean, who snapped up the licence to the book some time ago, is holding fire on producing the computer game until the movie has been sorted out. It's highly likely that we haven't heard the last of this one.

Moving quickly along to games that did actually make it to the shelves, Xenon II made its first ever public appearance in our Work In Progress pages. The most visible of Bitmaps, Eric Matthews, talking of this soon-to-be-a-smash project, was quoted as saying: "Sustaining interest is the most difficult thing. You can't pack everything into the first level and carry on playing." As history has proved, sustaining interest was the least of Xenon 2's worries.

The review pages also threw up a bumper crop including Forgotten Worlds, Balance Of Power - The 1990 Edition, Silkworm, Grand Monster Slam and RoboCop - but the highest scorer turned out to be Typhoon Thompson In The Search For The Sea Child with a relatively low 88 per cent. Where is Typhoon now?

Finally, we carried news of the impending release of New Zealand Story and caught a first glimpse of Cinemaware's It Came From The Desert and also featured Deluxe Paint III, The Sega Master System and Sierra's launch into Europe through Activision.

Watch out next month for another trip down memory lane as we cast our eyes back to the Summer of '89 and Issue 9.


Sid Meier's
RAILROAD
TYCOON
All
Change!
7822
NOW AVAILABLE FOR COMMODORE AMIGA AND ATARI ST.

WINNER
OF 4 GOLDEN
JOYSTICKS AWARDS
RAILROAD TYCOON
PC GAME OF THE YEAR
F19
BEST SIMULATION 8 BIT
& 16 BIT
RICK DANGEROUS
8 BIT GAME OF
THE YEAR
REFRESHMENT
ROOMS
PLATFORM
No 4
We'd all like to change the world from time to time.
But have you ever thought of actually starting again
from two hundred years ago?
From the start of national transport, commerce and
industrialisation. The tools you need to shape your
nation.
And make yourself a millionaire in the process.
Every decision brings a change. Every change a
decision. Total Control. Total Power. Total Addiction.
Become a Railroad Tycoon. Run a world your way.
You'll never want to leave it.
MICRO PROSE
SIMULATION • SOFTWARE

PLAY A ROUND

WIN A FABULOUS WEEKEND'S GOLF WITH ELECTRONIC ARTS

HAVE YOU EVER WANTED TO DRIVE a shot over 300 yards? Have you ever wanted to get out of a bunker without having to throw the ball manually. Have you ever thought "I wonder if I can get the ball to land on that rabbit's head?" Well now, thanks to Electronic Arts and *PGA Tour Golf* you can - well, almost.

Spending a weekend at a sunny golf course may sound good at the best of times, but when you spend it at one of the Trusthouse Forté golf courses it begins to sound like a dream come true.

Should you win this prize, you'll be taken from your home to one of THF's 16 golf centres (including famous courses like St. Andrews and Royal Birkdale), where you'll spend the weekend golfing, eating, golfing, eating and golfing. For those of you not quite so proficient, free tuition is included.

And there's more! The 10 runners-up will each receive an exclusive, limited edition Executive Golfing Shirt.

So you want to get clubbing? Then simply answer our three brain-taxing questions, pop them onto a postcard or the back of an envelope along with your name, address, telephone number, age and shirt size (S, M, L or XL) and send it to **Golfing Giveaway, The One Magazine, Priory Court, 30-32 Farringdon Lane, London EC1R 3AU**, to arrive no later than May 9th, 1991.

1. In golfing terminology what does an eagle represent?

a) A large bird flying over the course causing a distracting shadow, allowing the player to take his shot again
b) A nickname for a particularly accurate shot
c) Sinking a putt two strokes under the hole's par

2. Which famous golfer does not currently endorse a golfing computer game?

a) Jack Nicklaus
b) Greg Norman
c) Bruce Forsyth

3. What is the common name for the equipment shop found on each golf course?

a) The Pro Shop
b) The Tee Shop
c) Balls 'R' Us

EA's PGA TOUR GOLF - as close as you'll get to golf on your Amiga.

THE SMALL PRINT

The editor's decision is final and no correspondence will be entered into. Employees of EMAP, Electronic Arts and Trusthouse Forté, plus their friends, relatives, acquaintances, people who've passed them in the street (and so on) are not allowed to enter. Winners names will be published in a future issue of *The One*.

VIZ

THE COMPUTER GAME.

BUY VIZ THE COMPUTER GAME AND GET FREE VIZ BOOK OF CRAP JOKES
normal RRP £3.95

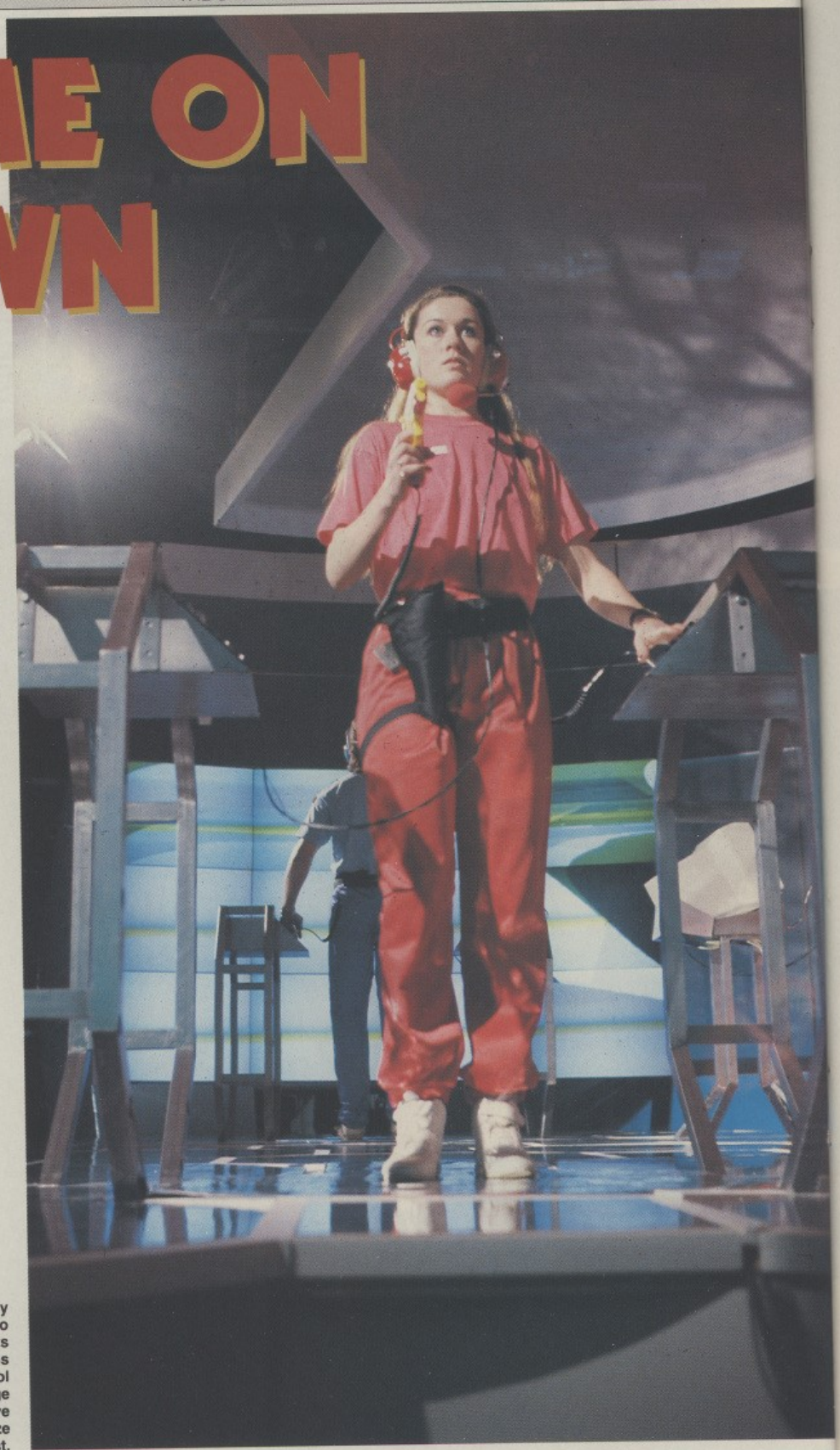
Available On:		
	Amiga	£19.99
	Atari ST	£19.99
	CBM 64 Cass	£9.99
	CBM 64 Disk	£14,99
	Spectrum Cass	£9.99
	Spectrum Disk	£14.99
	Amstrad Cass	£9.99
	Amstrad Disk	£14.99

Virgin GAMES

© 1991 Virgin Mastertronic and John Brown Publishing/House of Viz

COME ON DOWN

Back in 1987, Broadsword Productions' Knightmare first put adventure games on national TV. Four years on, the company is hoping to repeat that success with Cyberzone, a game where The Crystal Maze meets virtual reality. Kati Hamza tunes in.



BECAUSE THE GRAPHICS are only a 2D simulation of 3D, it was vital to hit upon a way of touching objects which didn't cause any problems with perspective. Using a pistol dispenses with the need to judge distances accurately – all you have to do is line up your sights, squeeze the trigger and hope for the best.

Red Leader is poised for action. Her shoulders are hunched and there are beads of perspiration on her brow. As she searches desperately for the target building, the sights and sounds of the city blur into one. Instructions from her Controller are pounding in her ears – keep left, watch out, Blue Leader is close. Suddenly there's a tremendous noise as a car races by, only missing her by millimetres, before speeding into the distance.

For someone who's just missed death by a whisker Red Leader looks remarkably calm. Why shouldn't she be? The car isn't real and neither is she. This is the *Cyberzone* – a completely interactive virtual reality.

However, unlike most virtual worlds you won't find it inside a specially manufactured helmet or booming out of a high-tech headset in quadraphonic glory. Cyberzone is virtual reality tailored for TV.

Cyberzone is the brainchild of a collaboration between TV production company Broadsword and Dimension International, a sister company of game developer Incentive. For Ian Andrew, head of Dimension and designer of such *Freescape* classics as *Driller, Total Eclipse* and *Castle Master*, it's his second taste of working for TV. He's already contributed graphics for another Broadsword production, BSB's *The Satellite Game*.

That, and Broadsword's other previous production, *Knightmare*, were adventures complete with costumes, actors and scenario – Cyberzone is different. Producer Tim Child defines it as: "A new telesport - a straightforward sporting encounter with a lot of strategy thrown in."

Each of these 'encounters' lasts for 30 minutes and involves two teams of two players (no strain was exerted on the producers' imaginations here, as the teams answer to the names 'Red' and 'Blue'), both aiming to be first to reach the central plaza of a city and turn the golden globe rotating at its heart (appropriately called Centrepoint) to their own colour.

En route, there are obstacles to negotiate, rogue vehicles to dodge and buildings to explore. Targets, some of them mobile, are scattered about the city – tagging these with your pellet pistol gains extra points.

Inside the virtual world, displayed on two giant video walls, each team's 'moves' are played out by a cyborg directly under the Leader's control. The cyborg is manipulated via a mobility station which electronically recreates its physical movements on screen. When the Leader runs, the cyborg runs, when he crouches, stops or turns, the cyborg does it too.

The Leader sees only a first-person perspective. His team-mate, the Controller, has access to a 'real time' map of the city which displays not only its main architectural features, but also the current position of both Red and Blue Leaders. It's the Controller's job to advise his Leader where to go and what to do by yelling advice into a headset. Should all go well, the programme culminates in a physically-exhausting last-ditch dash straight to the Centrepoint.

In a way, with Knightmare and The Satellite Game acting as pioneers, the first virtual reality game show was really just the next logical step. While both shows were on the air, Freescape, which in total provided

THE CONTESTANTS only get to see part of the picture. The version that is finally beamed into your living room is an edited amalgamation of 20 virtual cameras – and the team players hardly see any of it. Should things get too tricky though, the Zone Master may just bail you out: after all, it wouldn't make much of a contest if one of the competitors got run over early on...

DESPITE BEING BUILT of stain-less steel, the set (here being shown off by host Craig Charles) almost didn't prove strong enough. The mobility stations, proved pretty shaky at the end of two days' filming – they'll be reinforced when the series goes on air.

FREESCAPE AND SUPERSCAPE

Development of Dimension International's *Superscape* system, which is responsible for 70 to 80 per cent of *Cyberzone's* action, began in January 1989. The aim was to develop and expand features which its predecessor *Freescape* couldn't cope with: mostly because by nature it was a game development technique and limited by the capabilities of the machines on which it ran. Superscape runs faster than Freescape, features higher resolution graphics and has the processing power to cope with many more moving objects – including fully-animated human characters.

If you have access to an IBM-compatible computer and feel like testing all this out for yourself, two PD disks are currently available: one is a running Superscape demo, the other, *3D Benchmark*, is a utility designed to give you some idea of the power of your computer. Both can be ordered direct from Incentive/Dimension International (0734 817288) in exchange for £2.50; or you can find them in PD libraries and on bulletin boards.

only about 20 per cent of The Satellite Game's action, was blossoming into *Superscape*, a more flexible independent DOS-based system. When Tim Child saw it, he was suitably impressed.

"I went there expecting to see very much the same sort of thing I saw in Freescape, but was surprised to see they had taken things a lot further." As he saw it, the new system's main advantage was that it was representational.

"In a flight sim you can link two computers together and the players see each other as aeroplanes. What Dimension has done is to produce electronic men and women; when you go into one of their environments and see the other player you see them not as an aeroplane, but as somebody you can understand and relate to – an animated human shape." Tim saw immediate gameplay and television possibilities.

In one fell swoop, Dimension had overcome one of the main difficulties associated with putting virtual reality on TV. From a producer's point of view, the main problem with most virtual reality leisure applications is that they're 'player experience based'. While the lucky person wearing the headset is looping the loop or blasting seven shades of void out of the universe, everyone else can only look on with their tongues hanging out. Six million envious but frustrated viewers don't make for good TV.

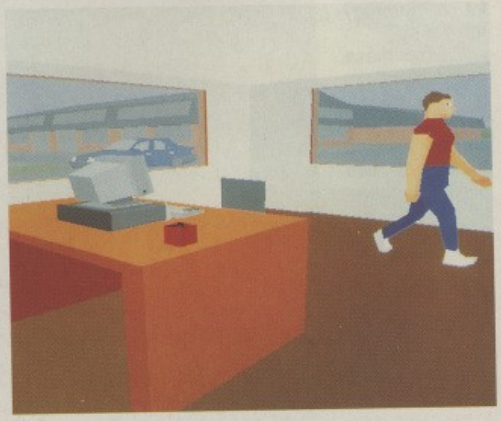
THE VIDEO WALL image is constructed from 12 high-definition mini-projectors. For the Leaders, the effect is to almost totally envelop their field of view – meanwhile, the rest of the audience gets the chance to share the first-person virtual reality.

FOR A FULL SHOW'S exploration, read 30 minutes of intense physical jerks – Cyberzone is definitely a tracksuit game. To avoid mismatching contestants there are two versions – one aimed at teenagers, the other for adults. The pace of the pilot programme even surprised the producer. "Some of the kids and the adults almost passed out with sheer excitement. We never expected that – we thought it was going to be reasonably exciting, but towards the end of the session we were actually stationing people close to the kids in case some of them overdid it." The result: an age limit – in true Logan's Run fashion, those who pass 30 are automatically barred.

However, thanks to Superscape, the Cyberzone audience actually gets to see more of the action than the players. As well as the real cameras trained on the studio action, there are 20 'virtual' cameras positioned inside the environment itself. These can be attached to objects, characters and buildings from any number of angles - some of which would be impossible to reach in the real world. While Blue Leader dices with death and sweats to spot those targets, switching to the relevant virtual view is guaranteed to make the audience feel smug.

There are other advantages to a computer-generated reality. In a world where nothing's real, the producer makes the rules. It's perfectly feasible for the game's Zone Master to subtly alter a contest's parameters while the action's going on. "We can introduce new elements, we can raise the pace, we can raise the stakes. It's a bit like winding up the net half-way through a tennis match." Obviously, there are reasons to be careful though: if things are altered so that they have an unequal effect on the teams, the producers could lay themselves open to a charge of cheating.

A successful pilot programme was recorded recently, featuring ebullient *Red Dwarf* comic Craig Charles as host. Now all they have to do is sell the series – if everything goes according to plan, a full season of Cyberzone contests leading to a



THERE HAVE BEEN considerable advances since this, the prototype Superscape human, stood up and walked. At Dimension's headquarters in Aldermaston they're slowly putting together a library of humans for their different movements. He's already learned to run, turn his head and crouch – the ongoing objective is to improve the fluidity and variety of available movements. Plans for an equivalent female version are currently in the pipeline.

TAKING POT SHOTS at the opposition is considered good tactics and all par for the course: if you're running behind it's an excellent way of knocking down the other team's points. Even so, it's rare for opposing cyborgs to meet.

CYBERTECH SPEC

HARDWARE: *Cyberzone* is made possible by a customised version of *Superscape* networked on five ICL PCs, each of which displays the action from a different viewpoint. There is one computer each for both the Red and Blue Leaders, providing them with a unique first-person view of the Cyberzone; one shared overhead/map view for both the team Controllers; one computer for the Zone Master, who acts as a kind of in-game god, altering the difficulty and nature of the game as he sees fit; and finally, a computer for the director, who can select any of the 20 in-game virtual cameras.

SPEED: The output speed of the individual computers is 90 frames per second, but because all five run simultaneously, the screen update needs to work at its slowest speed of between five and 15 frames per second to keep everything in synch. A 486 PC (called a Dispatcher) controls the environment and maintains the synchronisation.

GRAPHICS: All of the computers have high-spec SPEA graphics boards: there's a small amount of parallel processing involved to increase the overall speed and detail. The resolution in the pilot was 640 x 480 × 256 colours, although this may well vary in the final broadcasted version with corresponding increases in colour and complexity.

SOUND: Sound effects are calculated in realtime and are pre-programmed to adjust their volume according to distance from any of the 20 virtual cameras. Car noises, for example, increase realistically the closer the vehicle gets to the camera. Dimension provided the software that drives the sound – the effects themselves were manufactured separately.

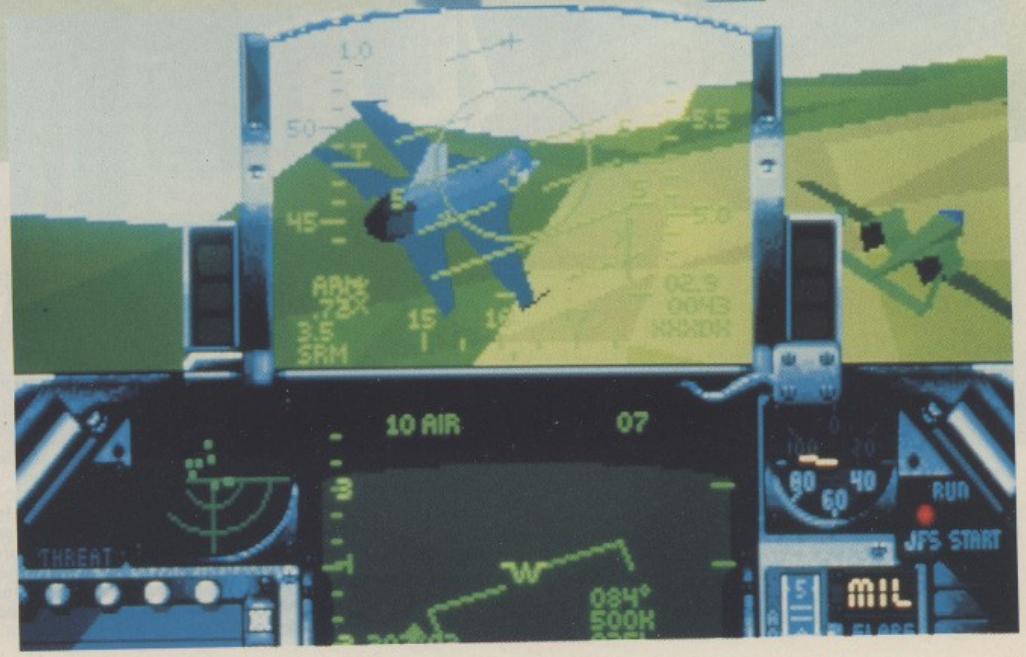
grand finale should hit our screens this autumn. Whatever happens, Tim Child is convinced that for TV, virtual reality is an open door.

For the present, he predicts that the most common applications are bound to be 2D (that's 3D simulated on a 2D screen), pretty much in the mould of Cyberzone. But once we get high-definition TV, different aspect ratio screens and a 3D viewing experience... who knows?

"MOST TV GAME SHOWS go looking for fun," claims Tim Child. "Often it's the 'hurry on down' principle where you cosmetically pretend everything is more urgent than it is." Host Craig Charles was hired to do just that, but in the end all that hype just wasn't needed. At crucial points during filming of the pilot, he was actually asked to calm the kids down.

TRIP THE FLIGHT

In the first of a regular feature on what's happening Stateside, Rik Haynes runs through the new features of Spectrum HoloByte's latest attempt to simulate one of the world's most devastating modern-day combat planes and checks out its revolutionary Electronic Battlefield System...



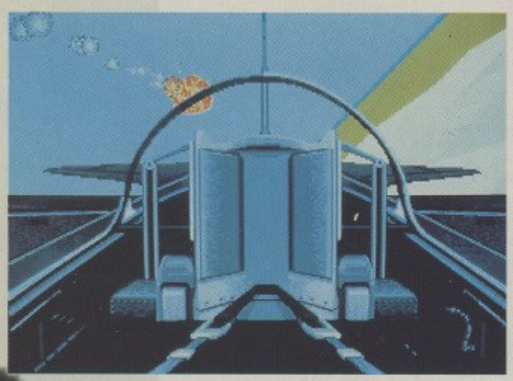
THE F-16's M61A1 20mm cannon can fire 6,000 rounds per minute - that's 'kick ass' power in anybody's language!

T FANTASTIC

GENERAL DYNAMICS' F-16 FIGHTING FALCON was one of the unsung heroes of the Gulf War. While the F117A Stealth Fighter sneaked into Baghdad and blitzed the media, American F-16's were busy taking out Iraqi ground targets in 'dirty' and dangerous combat missions supporting A-10 tank-busters. "The F-16 and A-10 were really the two workhorses of the Gulf War," reveals Spectrum Holobyte CEO Gilman Louie. "The F-16 is low-cost, very agile and does the job."

Spectrum Holobyte originally released Falcon, a simulation of the F-16, on the PC four years ago. Now the San Franciscan company has updated this classic flight-sim using the very latest software technology and programming techniques. What's the blueprint for the next generation then?

Coming soon on PC, Falcon Mark II really exploits the capabilities of this machine to the maximum. Unique game features include accurate mapping and 3D contoured terrain, highly detailed campaigns, 'high fidelity' flight model, and joint missions via modem with networking for up to 30 players on the same battlefield. The 'hi-fi' option allows players with a maths co-processor to take full advantage of their hardware for even greater graphic and flight realism – experiencing the actual feel of an F-16, contending with such manoeuvrability factors as lift and drag.



Falcon Mark II requires an IBM-compatible AT (286 or faster) and supports 256-colour VGA, 16-colour VGA, EGA, PS/1, AdLib, SoundBlaster and Roland graphics cards and sound-boards. Some of these will even produce digitised speech.

If your PC is equipped with EMS you can review your performance using the improved 'black box' replay software technology. This feature includes a 3D cube display called TACTS (Tactical Aircrew Combat Training Simulation) which shows your fighter, enemy planes, firing of every missile and the downing of all aircraft in a wireframe environment. If a bird sneezes, you'll know about it with TACTS!

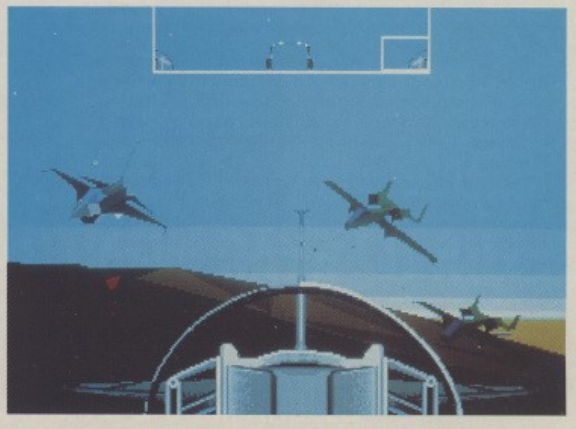
Players can choose which style of game they want to play. Instant Action is rather like an arcade game and puts you into a single F-16 in the midst of enemy planes. The action is scored according to how many enemy planes you can shoot down before being killed or ending the game. Fighter Weapons School lets you design and edit the original training missions to help you practice and fine-tune your skills. For example, you could assign four F-16s to go out, be engaged by four MiG-29s and continue on to destroy an airfield. You would plot the flight in and out of the target area, then run the simulation controlling one of the four planes. If you're unsuccessful, you can try an infinite number of other patterns and options until you get it right.

When you think you're ready for the hard stuff, why not go for a Campaign? Here you control a squadron of 16 planes, eight of which can fly missions simultaneously. The computer assigns each mission to reflect the regional conflict you're currently in. You'll face an even greater threat of enemy forces including SAMs (Surface to Air Missiles), AAA (Anti-Aircraft Artillery), small arms fire, Hind helicopters, shoulder-launched missiles and MiG-21, -23, -27 and -29 fighters. It's a good job you can arm your F-16 with a whole host of weaponry before each mission. No two Campaigns are exactly alike because the computer generates a new set of missions according to your success or failure on the battlefield.

Conversions of Falcon Mark II to the Amiga and ST are currently under consideration. No price has been set for the PC version, but Falcon Mark II (under the international name of Falcon 3.0) will sell for a whopping $69.95 in the States.

AN F-16 CHASES DOWN AN A-10 WARTHOG. By the end of the year, Spectrum HoloByte will have two flight sims of these two planes which will allow players to link-up and fly joint-missions or fight each other.

FALCON MARK II **INCLUDES MANY VIEW OPTIONS, including this backwards shot with no sign of the pilot...**

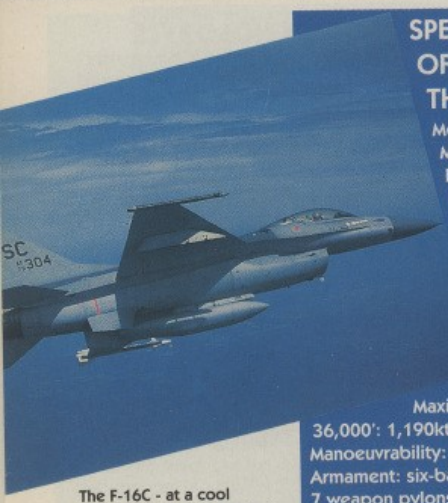


GENERAL DYNAMIC'S FIGHTING FALCON was the star of the 1977 Paris Air Show. The F-16 is now in service with countries all over the world, with a basic strip-down model costing a cool $18 million.

SPECTRUM HOLOBYTE

A weird name for a software house, right? The story goes that Spectrum is supposed to represent colour, Holo - 3D and Byte - computer. Spectrum HoloByte and Mirrorsoft are actually subsidiaries of the same parent company. The American games developer was started in 1984 and has stuck, in the main, to military simulations. The first release, Gato, was quickly followed by Orbiter (Space Shuttle simulation) and PT-109 (a simulation of a World War Two patrol boat). Then came Falcon in 1987, the company's first big hit. Spectrum HoloByte has even co-developed a professional version of Falcon to teach US Air Force pilots how to handle computer systems in split-second decision combat situations. "There are too many gauges and switches in modern-day combat aircraft. Pilots really get confused in combat situations," says Gilman Louie, "There was a lot of this happening in the Gulf War. Pilots were forgetting to arm the missiles, bombs and switching to the wrong guidance systems. We offer a low-cost trainer to make pilots aware of the problems." Other games by the firm from San Francisco include Tank, 'Vette, Flight Of The Intruder and Stunt Driver. Spectrum Holobyte has also enjoyed considerable success in the USA with Tetris and the other Soviet arcade puzzle games from Alexei Pazhitnov. In addition to the EBS series of military simulations, Spectrum HoloByte is now working on a new range of products under the name of Sphere of Influence. Players can run any country in the world for the next 25 years with simulations of world finances, global power, military and environmental issues via a TV user-interface. Each channel represents a particular viewpoint of how your actions affect this world. The game is very accurate because Spectrum HoloByte is using data from the World Bank. You also set-up your own goals at the start and the title supports multi-player options in a similar sort of way to the EBS series. This will be available towards the year's end on PC, Amiga and CD-ROM.

Gilman Louie (CEO Spectrum HoloByte) and Peter Biletta (MD Mirrorsoft) shaking hands over Flight Of The Intruder.



The F-16C - at a cool $18,000,000, this is out of the range of all but the richest games player.

SPECIFICATION OF THE REAL THANG

Model: F-16C Falcon
Maker: General Dynamics
Role: Fighter and Strike Fighter
Crew: One
Range: 540km
Ceiling: Over 50,000'
Maximum Speed at 0': 800kts
Maximum Speed at 36,000': 1,190kts
Manoeuvrability: Excellent
Armament: six-barrel 20mm cannon, 7 weapon pylons
Comment: Israel used F-16's on the raid against Iraq's nuclear facility at Osirak back in the summer of 1981. This was Saddam Hussein's first taste of superior American military technology and smart weapons. Perhaps he should have learnt a lesson?

ELECTRONIC BATTLEFIELD SYSTEM

The idea of the Electronic Battlefield System (EBS) is to allow players to buy different games in the series, for example Falcon Mark II and Avenger A-10 followed by a remix of Spectrum HoloByte's Tank product, which will all be able to work simultaneously across the same network. So if you have a LAN (Local Area Network) in your office, say a Novell network, you'll be able to have anywhere from eight or more players controlling helicopters, tanks and planes all working off the same battlefield in a similar scenario.

"You all work together or fight against each other on the same battlefield," confirms Louie.

Hostile company takeovers could soon be fought over simulated skies instead of unexciting spreadsheets! Players could even be in foreign countries thanks to the modem link-up option. "If you were flying an A-10 in London and I was flying an F-16 in New York," says Louie, "we could call each other up and play a scenario where I would have to escort you into a particular mission."

This Electronic Battlefield is a real-time replica of the real-thing. Players can have up to 270,000 square miles of a battlefield from anywhere in the world. Falcon Mark II will ship with Iraq, Israel and Panama. Spectrum HoloByte/Mirrorsoft will be releasing additional data disks with Korea, Philippines, Central and Eastern Europe. "The system is now capable of handling any terrain," remarks Louie. Spectrum HoloByte used American DMA (Defense Mapping Agency) data, so EBS is accurate to within a quarter of a kilometre and includes all the major cities and landmarks from the areas simulated. It's also 'relief-mapped' so it actually has all the hills, mountains and valleys. The list of ground targets is several pages long and includes skyscrapers, bunkers, trains, rail-yards, tanks, bridges, oil refinery's, and nuclear research facilities.

The 'wars' are campaign orientated, each mission is progresses on from the last one. For example, if you don't destroy the bridge in the previous mission, some enemy tanks could move across it. If you don't destroy these tanks then your supply-lines get cut-off during the next mission. If you lose your supply-lines you don't get any more fuel or weapons.

"This is a much more in-depth way of looking at a military simulation than simply buzzing about shooting up some targets and completing a mission," Louie believes.

Tank, a simulation of the American M1A1 Abrams tank, had the first components of EBS, but Spectrum HoloByte made so many enhancements to the EBS engine that Louie has decided to do an upgrade of Tank, appropriately titled Tank Mark II. This will support the new EBS and should be available later this year.

Future games in the EBS series will include simulations of the Apache AH-64 assault helicopter and possibly the F-15 Eagle and F-117A Stealth Fighter.

READY FOR TAKE-OFF

Here is a brief run-down of five flight-sims on the runway...

AVENGER A-10

Spectrum HoloByte/Mirrorsoft
PC (Winter), Amiga (TBA), ST (TBA)
The F-16 and A-10 combat planes seem to have become partners in air/ground attack. Little wonder then, that the next flight simulation from Spectrum HoloByte is going to be based around the tankbusting 'Warthog'. Avenger A-10 will be the second EBS title and includes all the features found in Falcon Mark II such as 3D contoured terrain and multi-player link-up. The A-10 proved to be a top tank killer during the Gulf War thanks to its devastating 30mm seven-barrel cannon. Two Warthog pilots set a record on February 25 when they destroyed 23 Iraqi tanks in a single day.

F-29 RETALIATOR

Digital Image Design/Ocean
PC (Next Month), Amiga (Out Now), ST (Out Now)
After almost a year of software reengineering, this award-winning flight-sim is now ready to rock 'n' roll on the PC. A futuristic simulation of the next generation of American fighter aircraft, F-29 features some of the fastest 3D graphics yet seen in a computer game with aerial combat, strategic bombings and interactive ground-based battles. The latest adaption includes improved flight modelling and extra bitmap 'intro' screens for added spice. The guys at Digital Image Design are now thinking about doing a follow-up, but they have to finish their Epic space combat sim first. This should be here in the autumn.

F-117A STEALTH FIGHTER 2.0

Microprose
PC (Winter), Amiga (Under Consideration), ST (Under Consideration)
The undoubted 'star' of the Gulf War is coming to a computer screen near you later this year. Thanks to its strange radar-evading shape and supersmart weapons, the F-117A was used to strike 95 per cent of the primary targets in Baghdad. American Air Force Lt. General Charles Horner said the Stealth Fighter exceeded his expectations of how many targets it could destroy with limited sorties. Each F-117A costs a mere $106 million. The forthcoming MicroProse simulation features nine different worlds (including Iraq, Northern Japan, Columbia and Panama), advanced enemy artificial intelligence, sprite explosions and a graduated horizon for greater realism.

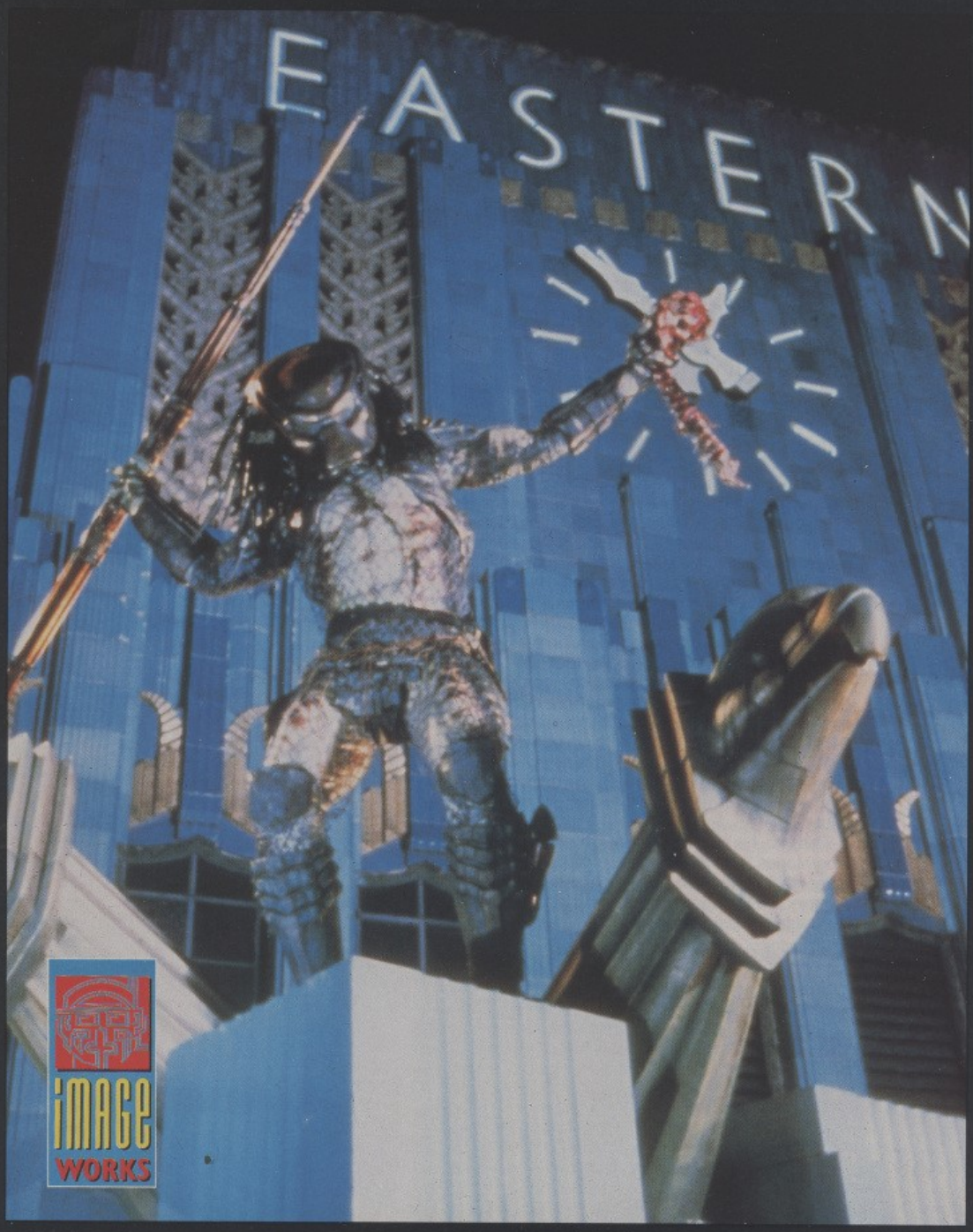
BIRDS OF PREY

Argonaut Software/Electronic Arts
PC (Winter), Amiga (Soon), ST (TBA)
The development of Birds Of Prey has taken a very long time, three-and-a-half years to be precise. This isn't very surprisingly when you consider the game accurately simulates over 40 modern-day aircraft from the Stealth Fighter and Space Shuttle to MiG-29 and 747 Jumbo Jet. Argonaut Software is trying to combine the best of flight-simulation and dog-fighting/ground attack action. Project Leader Chris Humphries believes it's very nice to have absolutely 100 per cent realistic flight coupled with superfast polygon 3D-graphics. See if The One agrees with him when we review Birds Of Prey in a future issue ...

PLANETSIDE

Psygnosis
PC CD-ROM (Early 1992), CDTV (Early 1992),
Potentially the most far-reaching and ground-breaking flight-simulation featured here, Planetside (working title) is the culmination of Psygnosis' experimental work with CD-based games. The photorealistic images (using fractal and ray-traced graphics) in the current demonstration running on CDTV look more like a movie than a computer game. In fact, Planetside is one of the first proper 'interactive movies' to appear on the scene. "We're more likely to make a good interactive product than say Warner Bros or Columbia," says Psygnosis co-founder Ian Hetherington. Even the flow of the game feels more like a film – with close-up and long-shots of the non-stop action.

PREDATOR 2™



. . . HE'S IN TOWN WITH A FEW DAYS TO KILL

AVAILABLE ON:

AMIGA, ATARI ST, COMMODORE 64/128,
SPECTRUM, AMSTRAD CPC, IBM PC & COMPATIBLES

TM & © 1990, 1991 Twentieth Century Fox Film Corporation. All rights reserved.
IMAGE WORKS, Irwin House, 118 Southwark Street, London SE1 0SW. Tel: 071-928 1454 Fax: 071-583 3494.

HYPERACTIVE HITACHI

What is Hitachi up to? Rik Haynes takes a tour of its labs to see what the future holds.

Walk into any high-street shop today and you'll see gadgets and gizmos thought impossible just 20 years ago. Video cameras that fit in your hand, cheap microwave ovens to 'nuke' food into submission and even washing machines with silicon brains to sort out those wash-day blues.

But how do the technologists actually devise these marvellous toys? And more importantly, what are these techno-pioneers planning for the next 20 years?

Hitachi is probably the best firm to ask. The talented scientists at this often overlooked Japanese electronics company are exploring and expanding the edge. "Creating new basic technologies for the coming 10 to 20 years," as Hitachi founder Namihei Odaira once put it.

One of the largest manufacturers of electrical and electronics equipment in the world, Hitachi never overlooks a potential wonder widget. Whether it be a home appliance or heavy industrial system – and its range of more than 20,000 products prove this point.

This obviously isn't a business for the faint-hearted or near-sighted. While our Government is threatening to slash the funding of new science projects, Hitachi spends $2.7 billion on research and development. Not bad, especially when you consider that the firm was established in 1910 as an electrical repair shop for a copper mining company. Hitachi is now the ninth largest corporation in the world with total consolidated sales of $45 billion and over 290,000 employees in 34 countries.

As the Second World War destroyed his country, Odaira strongly felt that: "A private company should have a laboratory with the capability to work on goals set for the future."

This was his motivation in establishing the company laboratories. Hitachi now has a total of nine corporate research laboratories, including facilities in Tokyo, San Francisco, Cambridge, Dublin and a design group in Dusseldorf, West Germany.

VISUAL TECHNOLOGY

In the decades since the birth of television, the progress of visual technology has been nothing short of spectacular. The last 30 years have witnessed the development of a long succession of products that made full use of the latest electronics of their day.

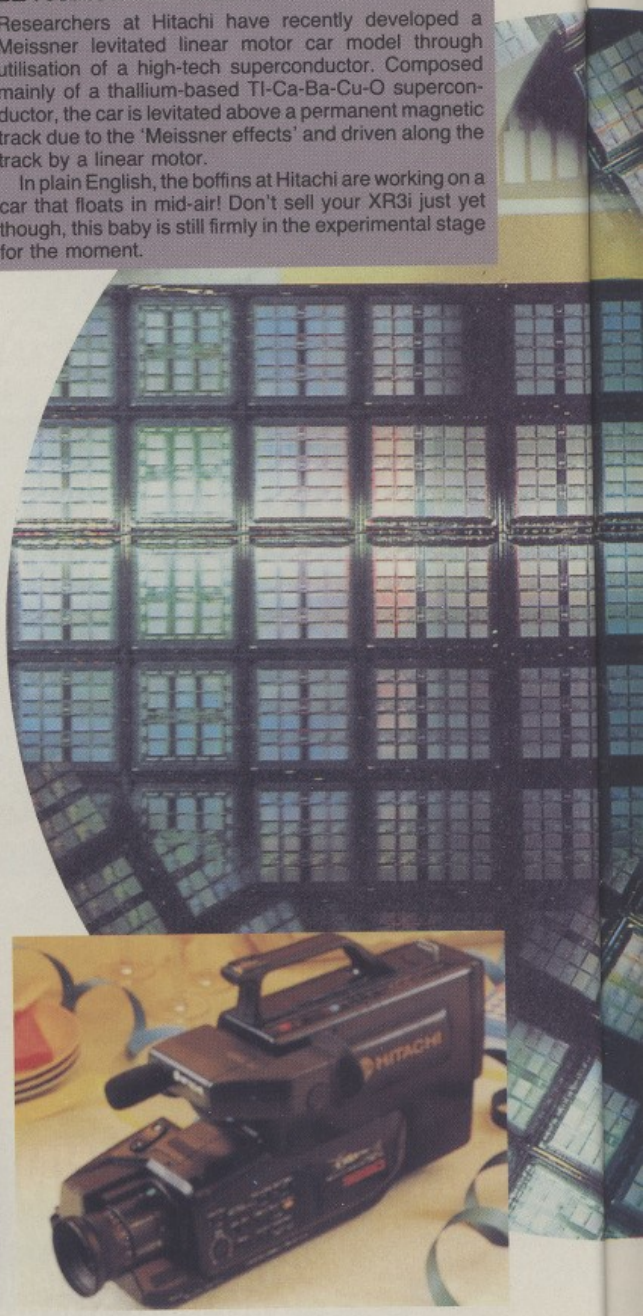
After achieving mass-market success in the 1950s, black-and-white TV began to give way to colour in the late 1960s. And, since then, we've been introduced to the video cassette recorder, the video camera, the video laserdisc player and the LCD TV.

Hitachi believes the 1990s will see technology progress at an even faster pace. "We can look forward to higher resolution, higher picture quality and screens which are larger and thinner than any available today," predicts the company spokesperson. "This being the trend of the times, Hitachi is striving to develop the home electronics products of tomorrow. Products which integrate the latest technology from a variety of fields, including electronics, fine machinery and software."

LEVITATING CAR

Researchers at Hitachi have recently developed a Meissner levitated linear motor car model through utilisation of a high-tech superconductor. Composed mainly of a thallium-based Tl-Ca-Ba-Cu-O superconductor, the car is levitated above a permanent magnetic track due to the 'Meissner effects' and driven along the track by a linear motor.

In plain English, the boffins at Hitachi are working on a car that floats in mid-air! Don't sell your XR3i just yet though, this baby is still firmly in the experimental stage for the moment.



NOTHING BUT THE BEST

Hitachi is affiliated with prestigious American academia such as the Massachusetts Institute of Technology and the University of California, Berkeley. To promote the international exchange of research efforts, Hitachi started HIVIPS (Hitachi Research Visit Programs) back in 1975. Each year, some 30 researchers from around the world join the Central Research Laboratory outside Tokyo in Japan. These people have various backgrounds, they include university professors, graduate students and exchange researchers from other companies. For further information regarding HIVIPS contact: Yutaka Kuwahara, Head of Office, R&D Administration Office, Central Research Laboratory, Hitachi Limited, PO Box 2, Kokubunji, Tokyo 185, Japan. And don't forget to tell them that The One sent you!

TFT-LCD

High demand for colour flat panel displays in handheld video game consoles camcorders, portable computers and TVs prompted Hitachi to devise a 10.3" high resolution TFT-LCD (Thin Film Transistor Liquid Crystal Display). This screen is crisp, space-saving and capable of running on low levels of electrical power.

Hitachi's TFT-LCD is a (1120×3)×780-pixel display with eight grey levels and 512 colours, plus a contrast ratio of more than 100 for ease of viewing. Contrast problems have plagued LCDs since their original conception, hopefully all the bugs have been ironed out with this latest innovation.

CD2

Hitachi's CD2 is a personal and interactive multimedia tool for entertainment, business and education applications. The basic function of this techno-toy is to enable the presentation of audio-visual databases recorded on compact discs, which can contain more than a thousand pages of full-colour natural pictures and accompanying CD-quality sound.

With a couple of discs, you could literally have the world in your grasp. A portable unit designed for viewing data from special compact discs, the CD2 combines a CD-ROM drive, 5" colour LCD screen and 16-bit microprocessor. It is 70mm in height, has an A4-size footprint and runs on batteries for portable operation.

Hitachi has equipped the CD2 with an LCD screen that relies on TFT (Thin Film Transistor) technology to achieve a high-quality full-colour picture. "CD2 employs a user-friendly interface that allows operators to forget that they are dealing with a powerful computer," reveals Hitachi.

After all, sufferers of technophobia would rather work on a deck which looks like a TV hooked up to a compact disc player than a high-end computer. For wire-heads among you, the CD2 uses CD-ROM/XA discs which can store 2,000 full-colour compressed VGA images or 16 hours of audio, or a lesser combination of both.

The search for human talent goes far beyond the boundaries of downtown Tokyo. Hitachi runs a special programme to encourage researchers from foreign countries and other companies. Industrial spies need not apply.

Almost half a century has passed since the Hitachi Central Research Laboratory was created in 1942. While Japanese soldiers were patrolling the steamy jungles of Malaysia, Hitachi was busy planning the future.

"The next century is expected to herald a culture of highly sophisticated, individualised information. Electronics technology is envisaged as bringing about prosperity in personal life. Such technology will be incorporated into human-friendly systems, and multi-media communications network technology enabling communication with anyone, at any place and at any time. The driving forces behind the development of this technology will be you and us," as one company spokesman puts it.

Big risks reap bigger rewards. Anything is possible. From ultrafast processors and mega-memory chips to the next generation of TV systems and laptop VCRs. Some of the more exotic projects currently being developed in Hitachi's labs border on pure science fiction: computers which think for themselves, ultrasonic cancer treatments and walking robots. Remember Luke Skywalker's landspeeder in Star Wars? Hitachi seemingly does, because it's also working on a levitating car.

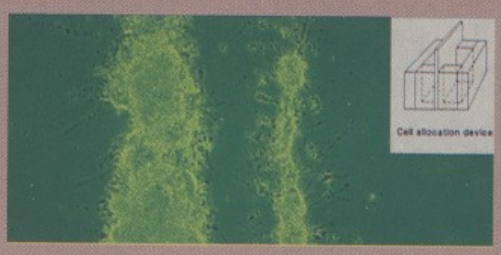
"A lot of people who see the film will experience that kind of future."

Ridley Scott, director of Blade Runner

ARTIFICIAL BRAIN

Perhaps the most ambitious, and far-reaching, project currently being played with in the labs of Hitachi is the three-dimensional neural network or 'artificial brain'. In an attempt to explain the computation principles of the brain, Hitachi has developed two original techniques for nerve cell culture: the arranged placement of neurons onto a culture plate and control over the direction of neurite growth.

The study was carried out in collaboration with Dr Jun Fukuda of the Department of Physiology at the University of Tokyo, School of Medicine. If the sci-fi writers are to be believed, in the coming decades a new form of artificial lifeform could be created in the labs of companies like Hitachi. It certainly makes you think.

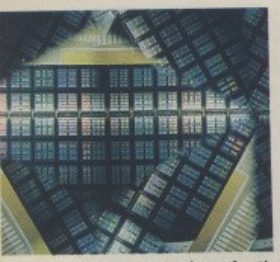


LAPTOP VCR

Luckily though, Hitachi isn't just working on 21st Century cyber-gear even today you can go into your local high-street dealer and pick-up a neat piece of the company's consumer electronics.

The Lapwatch is the world's first multi-system portable TV and VCR combining a 5" colour TFT-LCD, 20-channel television tuner, full-sized multi-system VCR that plays VHS cassettes of any format. The deck is compatible with PAL, NTSC and SECAM broadcast systems so you can use it in Europe, America and Japan. You even get special magnetic shielding for a clearer reception.

Hitachi describes the Lapwatch as a "creative fusion of advanced technologies to make your fellow commuters envious on your train journey to and from the office." Innovation isn't cheap though. Lapwatch will set you back a hefty £1,300, and that doesn't include the wallet-busting amount of cash you'll spend on batteries to feed it.



"Scientific technology has determined the progress of our civilisation and created unlimited possibilities for the future," says Katsushige Mita, President of Hitachi. "It is the means to make humanity's dreams come true. Now it has become vital to ensure that our technological innovations are in harmony with nature."

Mita is not riding the new wave of 'green' perfection. Hitachi was environmentally aware 50 years ago – apparently, work crews were instructed to spare living trees wherever possible when constructing the first lab in Kokubunji, central Japan.

"Our founder built Hitachi with the belief that the company should serve society through technology," offers Mita. "Hitachi innovates to improve and enrich the lives of individuals and societies. We hope that technology will foster the creation of a global community."

Space really could be the final frontier. Although the ultimate challenge is inner rather than outer space. Nanotechnology sounds crazy: futuristic microscopic-machines the size of atoms cut your hair and clean your teeth – and you won't even notice them doing it! One thing is certain, Hitachi will probably be there with patents pending. It's already been responsible for a 80,000 of them.

History is for the taking. Hitachi is simply making sure it gets a huge chunk of tomorrow. The company philosophy goes something along the lines of 'if you've got the technology, you've got the future'. So, with this in mind, let's take a look at some of the innovations currently under wraps at Hitachi's HQ...

"This is an age of wonder. We inhabit the dreamscape of our fathers, surrounded by the fruit of their innovation. The technological achievements of modern society are the realisation of the human spirit of curiosity and inquiry. Modern scientific technology has improved the way people live in thousands of dramatic ways. Now the central issue of our time is to harness technology for the good of people and the good of the planet. Hitachi is committed to innovation that will make the world a better place."

A Hitachi Spokesperson

THINKING MACHINES

The invention of the electronic computer ranks as one of 20th Century mankind's greatest achievements. Neural-computers, machines that can think for themselves, could start a similar revolution in the years to come.

Whereas contemporary computers operate logically, neuro-computers operate along lines that resemble human intuition. They're especially suited to electro-recognition problems which defy solution by traditional approaches.

The performance of a neuro-computer depends on the number of neuro-circuits it contains. Up to the present, Hitachi has succeeded in building a 1,000-neuro-circuit computer. Future advancements could yield hyper-intelligent machines which respond to and anticipate your needs just like a real person.

HDTV

In recent years, many efforts have been made by manufacturers, research institutes and broadcasters to develop the next generation television broadcasting system with photorealistic picture quality and a 'cine-mascope' display.

Hitachi has been focusing on the research and development of HDTV (High Definition Television) devices, including cameras, monitors, receivers and video tape recorders for both professional and home use. The resulting domestic 1/2" high definition video cassette recorder features a recording time of more than two hours for baseband HDTV signals and utilises compact size cassette and Metal Particle (MP) tape.

So why isn't HDTV in Dixons yet? Japanese, American and European visionaries have been squabbling for nearly five years over which HDTV system to adopt. Replacing the current broadcast and domestic TV-systems will create a market worth billions of dollars and everybody wants their slice of the cherry pie. World Cup Italia '90 was recorded in Japanese HD-format, so I know which system I'm rooting for!

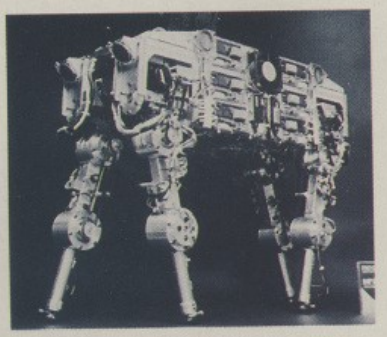
WALKING ROBOT

Soon, you could be taking a robot for a stroll instead of your pooch. A reduced-scale quadrupedal (that's four-legged to you and me) walking robotic mechanism has been developed at Hitachi's Mechanical Engineering Research Laboratory in Japan. This robot features the living creature-like capabilities of walking and stepping over obstacles.

In addition, this robot is 'smart': it operates autonomously and can adapt intelligently to understructured and cluttered environments with minimal energy consumption.

A robot capable of trotting across flat ground in a way similar to that of a horse, and walking without help in environments with staircases and other physical obstacles is being developed as part of an eight-year large-scale national project coordinated by Japan's Ministry of International Trade and Industry (MITI).

Hitachi's control technology can be adapted to robots for use in space, agriculture, construction, health and nuclear power facility maintenance applications to name but a few of its wide and varied possibilities.



The Japanese love robots, they can be seen in every part of their culture from factories, movies and comic books to advertisements, toys and nightclubs. According to a spokesperson, "We at Hitachi will continue to improve our established robotic technologies which we believe are indispensable for the enhancement and advancement of human society".

VIDEO PRINTER

A product of Hitachi's advanced TDT (Thermal Dye Transfer) technology, this video printer can provide a near-photo quality picture from a video image within 50 seconds. It employs a new mechanism which minimises the time for paper transportation, colour changing and paper ejecting, plus a new thermal compensation system for faster printing with stabilised tone and colour density.

Ordinarily, thermal printing is very slow. This video printer represents the current state of the art and can be used in conjunction with Hitachi's CD2 portable CD-ROM viewer.

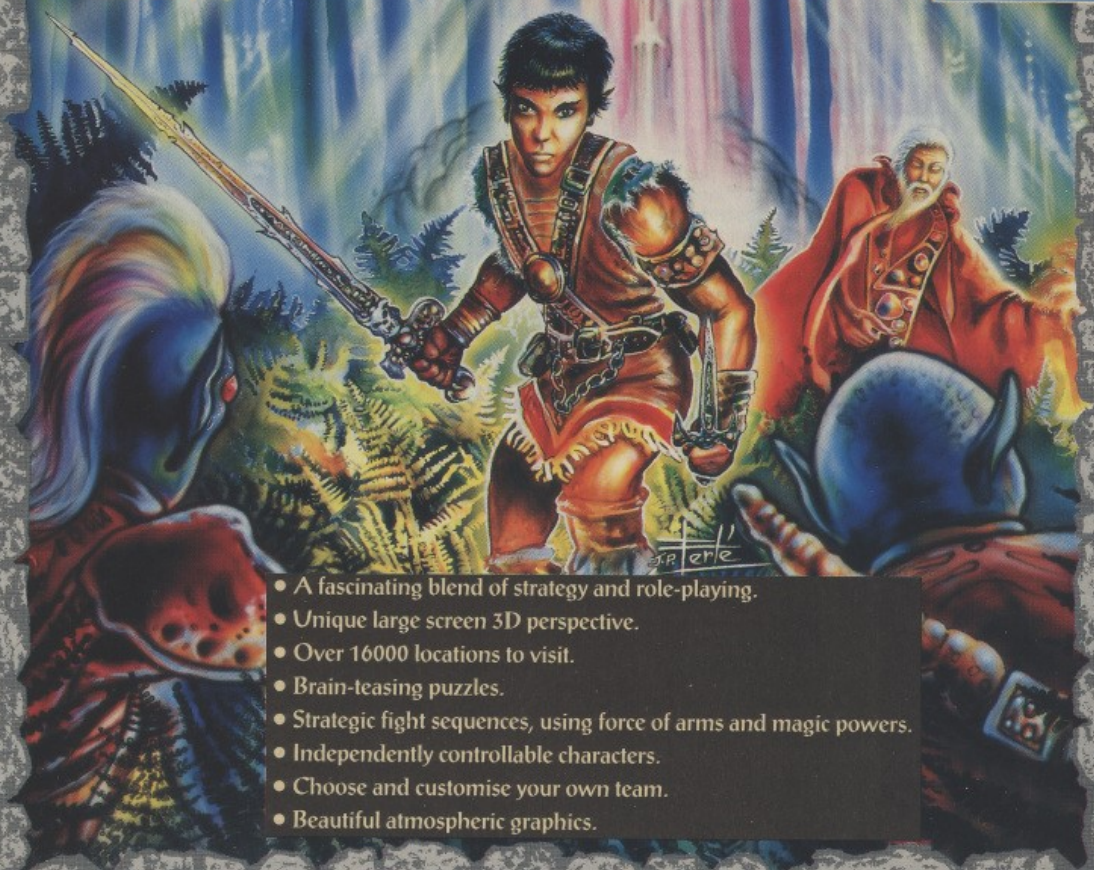
Crystals of Arborea

A Strategic Role-Playing Challenge

Morgoth, Lord of Chaos, he who brings nothing but death, worships nothing but destruction has infected your world with his evil.

In sorrow and anger the gods drown all except the land of Arborea, home of the four sacred crystals of harmony, stolen by Morgoth and his servants.

In a race against Chaos, Prince Jarel and a band of trusted companions must find the crystals and restore them to their sacred shrines. To fail is to lose everything.



- A fascinating blend of strategy and role-playing.
- Unique large screen 3D perspective.
- Over 16000 locations to visit.
- Brain-teasing puzzles.
- Strategic fight sequences, using force of arms and magic powers.
- Independently controllable characters.
- Choose and customise your own team.
- Beautiful atmospheric graphics.

Silmarils

© 1991 Silmarils

AMIGA • ST • PC

MARKETED BY

PALACE SOFTWARE

ALL TOGET

Chris 'Balance of Power' Crawford gathers together hundreds of programmers and game designers each year to debate the state of the art. Steve Cooke tagged along...

'This all started in my house three years ago,' says Chris, 'and there were about 25 of us then.' He stands by the pool at San Jose's Hyatt Hotel, surrounded by about 200 game freaks of all description. Another 300 or so are busy milling round the various lecture rooms, buffet tables, coffee dispensers, bars, and other conference locations. The Computer Game Developers' Conference, it seems, has come a long way...

This year it ended up as three days of non-stop gamespeak. There were lectures on optical disk game development, self publishing, graphic violence, artificial intelligence, sexual consciousness, and fantasy role-playing – and all those took place in the first two and a half hours of the first day! In all, there were nearly 60 sessions, including an Apple sponsored dinner, a massive banquet, and some very serious drinking.

The list of software celebrities was endless, though British attendees were conspicuous by their absence. Staggering from one buffet table to another, you could bump into EA boss Trip Hawkins, Chris '*Wing Commander*' Roberts, Steve '*Leather Goddesses*' Meretzky, Noah '*Indy III*' Falstein, and Richard 'Lord British' Garriott – and still be sucking on the same slice of fresh pineapple.

So what did these luminaries actually DO during those three days? Let's mingle with the throng, prick our ears, and try to pick up what was going down...

Rob Fulop was the man behind the Atari Missile Command and Night Driver cartridges and, later, Demon Attack and Cosmic Ark. He's perhaps the first producer in the world to develop movies specifically shot for interaction and now runs a company called Interactive Productions. In one of their latest titles, developed for CDI, Fulop used live actors and voice overs to produce Hotseat – a family game in which players have to guess how their friends would respond to awkward social dilemmas.

Hotseat. Enter the screen host who calls players by their names and keeps the action rolling

The game hosts present the players with dilemmas. In this case, would you kiss a girl who had (in Fulop's immortal phrase) 'Horsemen of the Apocalypse breath'?

Please be seated...

Conference events were divided into lectures, panels, debates, seminars, and round tables. At least that was the theory. In practise, any lecture could suddenly turn into a debate, and some debates sounded depressingly like lectures, as the audience sat stunned into silence by some particularly esoteric bit of game theory. We name no names...

The afternoon of the first day saw Crawford and Origin's Chris Roberts battle it out in a debate entitled Good Graphics vs Good Gameplay. Crawford was there for gameplay, Roberts was rooting for graphics, and the audience were there for blood. Plenty was shed...

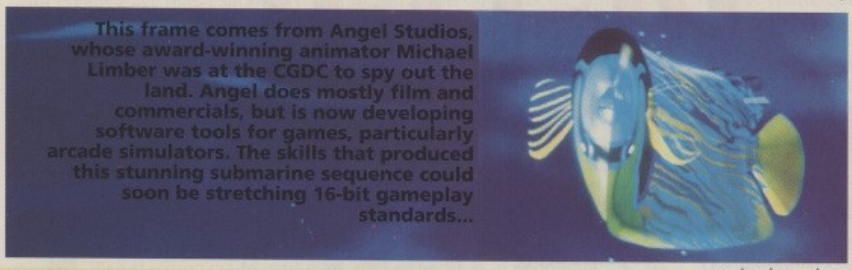
The debate began with Chris Roberts bravely outlining the importance of presentation. You could tell the audience were unsympathetic – despite the fact that many designers spend their time extolling their latest 3D routines, none would admit to putting anything other than gameplay first. Roberts had the air of someone discussing the principles of kosher butchery in a room full of vegetarians, and he got about as sympathetic a reception. Crawford, who is a particularly fiery speaker, then proceeded to dazzle the audience with his defence of gameplay. Spurred on by the audience, the debate rapidly degenerated into a series of thrusts between the speakers, most of which were either aimed at Wing Commander (supposedly all graphics, no gameplay, and huge sales) or Crawford's *Guns And Butter* (supposedly all gameplay, no graphics, and no sales). Finally, Roberts understandably changed tack before the storm and began to argue the opposite case, or even both cases at once. This led to total confusion, lots of noise, and a vote which naturally reassured everyone that gameplay was top hole and don't you dare suggest otherwise.

Rob Fulop, developer of over 100 multimedia products, fluent in Hungarian, and single...

The first day also saw a session on Virtual Reality, with Eric Gullichsen of Sense8 and Scott Fisher (previously of NASA's Virtual Environment Workstation project) amongst the speakers. Fisher gave a hilarious slide show of the history of VR gadgets,

THIS AREA OF THE WEST COAST was on most computer enthusiasts' itinerary last month. Punters descended first on San José for Chris Crawford's bash, then flocked up Highway 101 to attend the SPA awards ceremony, then battled their way back down the highway to San Jose again to attend the CD ROM conference...

...GETHER NOW...



This frame comes from Angel Studios, whose award-winning animator Michael Limber was at the CGDC to spy out the land. Angel does mostly film and commercials, but is now developing software tools for games, particularly arcade simulators. The skills that produced this stunning submarine sequence could soon be stretching 16-bit gameplay standards...

show of the history of VR gadgets, culminating in a giant helmet, looking like a primitive sea urchin, which kept the unfortunate user aware of sensory events outside his field of view. It did this by (I kid you not) physically jabbing one of its spines onto its victim's scalp. The location of the jab indicated the threat direction, alerting the user to, say, an incoming missile from behind. Ouch! Followed, in all probability, by bang!

Eric Gullichsen showed off Sense8's VR system running on a PC. This system, called *WorldToolKit*, operates rather like a Rolls Royce version of Incentive's *3D Construction Kit*, accepting world geometries from programs like *AutoCAD* and then using Intel's powerful DVI graphics processors to apply scalable textures to objects, manipulate them, and generate a stereoscopic display for a headset, all in real time. Neat, but around £10,000.

On the second day, Brian Moriarty gave an exquisite talk about The Birth of a Medium. Once responsible for titles like *Wishbringer* or (more recently) *Loom*, Brian has now moved over into educational software at Lucasfilm and has been researching the early days of cinema. He showed the audience clips from some of the first movies ever made, and reminded us that film, like video games, was once a volatile niche medium that no-one ever believed would develop into an art form. There's hope for us yet...

Or is there? Chris Crawford took the stage again on the second day with an intriguing talk entitled The Evolution of Taste. He got his audience's attention immediately by using some very long words that none of them understood, to wit the catchphrase 'Ontogeny recapitulates phylogeny'. However, Chris, being a very able speaker, soon twisted this incomprehension into a clear, if rather disturbing, vision. 'I am very worried,' he confessed, '...about the future of our industry.'

Chris Crawford, creator of thirteen games and editor of The Journal of Computer Game Design.

His unease comes from the way the gamesplayer's taste for gaming experience matured. Using candy, comics, and cartoons as examples, he showed how in other areas people's taste slowly broadened to include diverse forms of (in this case) food, literature, and film/TV. But for the computer gamer, no such development was possible, since the majority of video games were still at the candy stage of stylistic evolution. People could therefore grow out of the gamesworld faster than it could evolve and offer them more diverse entertainment. Ontogeny – the development of the individual – recapitulates (mirrors) phylogeny – the development of the species. But in the video games business, the development of the species has been so brief and stunted that there is not enough background for the individual to draw on in the development of his own likes and dislikes. Fed on a constant diet of limited variety, he soon sickens and switches the TV back on.

A bleak scenario, and a clear message from the man behind the Computer Game Developers' Conference that we had better start developing and stop cloning..

The Hotseat player secretly enters his decision, while his friends try to predict what he would do...

Looks like she's accepted a mint. Thank heavens for that!

'The deeper power of telepresence awaits below the waterline. One can imagine a transformation spawned by sensory immersion, like the Tokyo night, where the burning sky collapses in upon its content, driving meaning down into a realm that is entirely unsuspected, intimate, and vast...'

Brenda Laurel, Telepresence Research, cyberspace pioneer..

Not content with having a hand in the design of one of the all-time-greats of computer games, this man also knows the nation's breakfast habits. All of this and more as Rik Haynes goes One On One with...

PETER MOLYNEUX

A LOAD OF BULLFROG

Peter Molyneux and the guys at Bullfrog originally developed boring 'serious software' such as databases and CAD packages for the Amiga. In fact, the Guildford-based company went under the name of Taurus back in those dark days.

Strangely, things didn't work out too well, so Molyneux visited Telecomsoft in London, lied about his games programming skills and picked up the contract to convert *Druid* onto the Amiga and ST. Bullfrog was thus born.

The company's next project was an original game for Electronic Arts, *Fusion*, a hybrid shoot' em up. Unfortunately, this was a flop. Then, in a rather smart move, Molyneux bought some Lego bricks and the boys finally had a chance to have some fun. The rest, as they say, is history.

Bullfrog achieved critical acclaim with *Populous* in 1989 and *Powermonger* a year later. Even Molyneux has lost count of the number of awards these top titles have picked up in the last two years. Apparently, Japanese gamesters enjoyed Populous so much that they now listen to a special audio-CD filled with music and sound effects from the game!

How did *Populous* come about?
When we formed Bullfrog, the idea was that we'd come up with types of game that hadn't been made before, not to copy other people's ideas. That's really why we started to design Populous - it was something a little bit different. The game concept came about when we were messing around with Lego - as one does in the daily course of life. We built this landscape, rather like a Populous landscape, and we transferred it over to the computer. The game then built up on that. We worked out the basic gameplay in a couple of weeks using the Lego. It was the only way we could simulate the game. That's why the landscape was so bulky, because it was a simulation of the Lego itself. In fact, pieces of the stuff are still lying around the office, although we haven't used it for *Populous* 2... yet. By the way, I don't agree with all this new Lego with smiley faces printed on it - it destroys creativity.

And what about *Powermonger*?
This came about as a result of Populous. We realised that the view of you standing on a hilltop looking down on the little people really hadn't been exploited by anybody else. We wanted to do another view where there were just little people - although not necessary isometric or looking like Populous - and make the game more strategic. Basically, Powermonger was inspired by the view in Populous. It was also inspired by the fact that if you watch someone play Populous they will always talk to the people. Also, it's easier to simulate something big than it is to simulate something small. For example, in the simulation of a world you can make sweeping generalisations, but simulating one person doing one thing is incredibly hard. You have to worry about them blowing their nose or scratching their leg. As Bullfrog is getting better and better at programming, we're getting more and more detailed, more and more personal. I suppose, eventually, we'll simulate a single person. At the moment we're only on country level. I think the next stage will be town level - but I don't mean *Sim City*. Some sort of town simulation getting down to that personal level so you'll see people doing more things.

Did you ever expect Populous to become so successful?
We thought people would be interested in Populous because of its weirdness. We thought that people would just say 'that's really weird' and move on. We had no idea whatsoever that it would be as successful as it has been. Our first inkling started when a journalist came down here. We tided up the office especially and we were really nervous. He was fairly cool, so I turned around to him in the pub during lunch and asked him, with trembling lips, 'what do you think of Populous?' I expected him to say it was, well, okay, but he said it was one of the best games he'd ever played. I nearly fell off my chair, I couldn't believe one of the megastar journalists had enjoyed playing Populous so much. The funny thing is, we came back to the office and he asked us if he could have another go. Obviously the folks at Electronic Arts had a much better feeling for it because they'd done so many games before.

Were you more confident about Powermonger?
I was really nervous about Powermonger actually, mostly because it was under such time-pressure. It was a very big project to undertake - especially as we were also overseeing the conversions of Populous. People don't realise Populous has gone onto so many different formats, but so far there's been 15 to be precise. We have to put a little bit of time into each one - technical assistance and mundane things such as sending out the right sprite files and code. So, during Powermonger, we also supported the Populous conversions and the *Promised Lands* data disks - oh, and we programmed *Flood* as well. Ideally I would have liked to work a little bit more on the gameplay in

Powermonger. I think the gameplay needed to be a bit more interactive, erm, you need a little bit more to do. It appeals to a lot of people who like very, very high strategic games, but it needed that extra element that would appeal to everybody and it didn't really have that. I shouldn't really be saying this, I should be hyping everything we do.

Are there any plans to put Populous into a coin-op?

Sort of. A long time ago there was a lot of talk about putting Populous onto SNK's Neo-Geo arcade game system. I couldn't see how it would work, but with the credit card system you could slap your card into the machine, play Populous for 20 minutes, then take you credit card out. You could go back at any time and resume play exactly where you left it. But Populous really doesn't lend itself to the arcades, not in the way that something like *Lemmings* would.

Why exactly do you think Populous and Powermonger were so popular?

If I knew the answer to that question then I'd feel wonderfully happy and I'd sell the idea to several companies and make millions and millions of pounds. I can't put my finger on it exactly, it's something to do with them being a little bit different from all the other games. Secondly, I think it's to do with them being more personal than most games. You see these little men walking around and so you feel as if you're in control of something which is big and massive. The megalomaniac-type aspect. I think everybody wants to conquer and destroy everything. Most games are based on winning, conquering or killing. All those three elements mixed together in a certain way make games such as Populous into the successes they are. It appeals to just the right element in each person.

What's going to be new in the sequel to Populous?

We're doing an awful lot. It's a complete and total rewrite... we're not even looking at the original code. When we wrote Populous, we barely knew how to put a sprite onto the screen, now, we're concentrating on producing lots and lots of effects. For example, where before you just had earthquakes, volcanoes and swamps, you will now have 40 effects ranging from tidal waves, plague and pestilence to tornadoes and whirlpools. You gradually get access to all of these effects as you play each level. It's almost like a role-playing came in that respect. As you get better as a God, your ability to cause havoc or good gets better. At least, that's our objective to start off with - that might change as we develop it up. That's what happened in the original Populous. At the moment it's set in Ancient Greece because of the simple architectural style. It should really look visually stunning with the buildings, it's hard to describe in words. In essence, Populous 2 will play more or less the same as the first game, we're just at the stage to start working on the gameplay. I want to get the feel right. At the moment, it plays incredibly quickly: you can cover the landscape with buildings within two minutes, so that's going to have to be slowed down. We're hoping to do lots on the sound side, that's really important, but we're having a real problem finding anybody that's able to do that. None of us here are musicians. We're looking for someone with the talent to implement our ideas. We're hoping to do some wacky things with the sound that have never been done before. Lot's of disaster-ridden sounds and lots of people sounds. As people do things and move around there are really context-sensitive sounds to inform you on the game. For example, if one of the little people see's an enemy that's off-screen he might shout 'Charge'. You'll hear this little squeaky 'Charge' and realise there are some enemies coming across the hill. The little people will actually inform the gamesplayer that there is something they should be looking for instead of just being an audio reaction to what's just happened.

Is there going to be a *Powermonger* 2 ?

There are no plans. I don't like getting hung-up on sequels. In the end you end-up doing more sequels than you do original games. We've got so many games ideas that we've sketched out that I'd rather look to producing one of those. I wanted to do Populous 2 because there was so much left out in the first game due to a lack of memory. We know a lot more now.

Are you developing any of these other games?

We're working on two new projects, which we're calling *Bob* and *Creation*. These are just working titles. Creation was the original title for Populous, but I'm not saying that Creation is anything like Populous. It's not being designed on Lego, but we are using another physical medium to design stuff - I'm not going to say what because this would give you a clue as to what the game is about. Bob has got vague similarities to what we've done before. It's an action strategy game - whatever that is! Graphically, I think Bob is the most exciting game I've seen in a long time - and I'm not hyping you up. It's called Bob because 'B' 'O' 'B' is very easy to type on the keyboard. I would think Bob will be finished round about the end of the year and Creation should be sometime early next year.

Do you still play games?

Of course. I'm just having a look at *Eye Of The Beholder* on the PC, but I'm not sure if I want to waste my time on that as it's a bit too like *Dungeon Master*. Also, I've finished one level of *Captive*, erm... and I'm not going to comment too much on *Genghis Khan*. These are really taking up my time at the moment. I like games that are good value for money. That is one of the criteria when we design games, if you pay £25 for a game you should get 25 hours worth of enjoyment out of it. I know this is going to sound really naff, but I have been playing quite a lot of the original Populous.

How do you see games evolving?

The simulation side will continue taking off as people start to program better and better. It's now getting into the realm of things like *SimEarth*. The amount of research you have to do for a game like SimEarth is absolutely enormous. Whether or not there was a viable game at the end of it - that's up to you to decide. It shows there's a lot of scope for simulations. They do push the industry along because they appeal to more and more different types of people rather than just a kid who wants to just zap an alien. But we can't afford to get too conceited about simulations, we must always remember that they've got to be fun to play. It's a very subtle blend of creating games and creating simulations for simulation sake. Games are going to get more and more detailed and there are going to be less and less software companies and development houses. Games will soon take five years to write. I'd like Bullfrog to branch out to other media like board games - 95 per cent of the board games I play are crap. I'd also like to look into multimedia but I want to do something special with it.

What sort of gadgets do you think will be on-sale in, say, the first decade of the 21st century?

We're going to have to get rid of all forms of joysticks and keyboards. It must be theoretically possible to have direct link to bypass the audiovisual outside world type thing of the human brain. If you could do that, it would be absolutely outstanding. Virtual Reality is just a gludge method of fooling the body. I'm talking about directly interfacing up to your mind - completely bypassing your eyes, ears and hands - probably by neural impulses. You could just have an electronic sensor at the back of your neck. But that's probably not in the early part of the 21st century. You going to see things like speech recognition which I think is going to be great - it will make computers seem much more friendly. You're going to have paper-thin TV screens. You'll also have nicotine- and smoke-free cigarettes, they'll actually be good for you, so the armchair ashtray will be a smash hit.

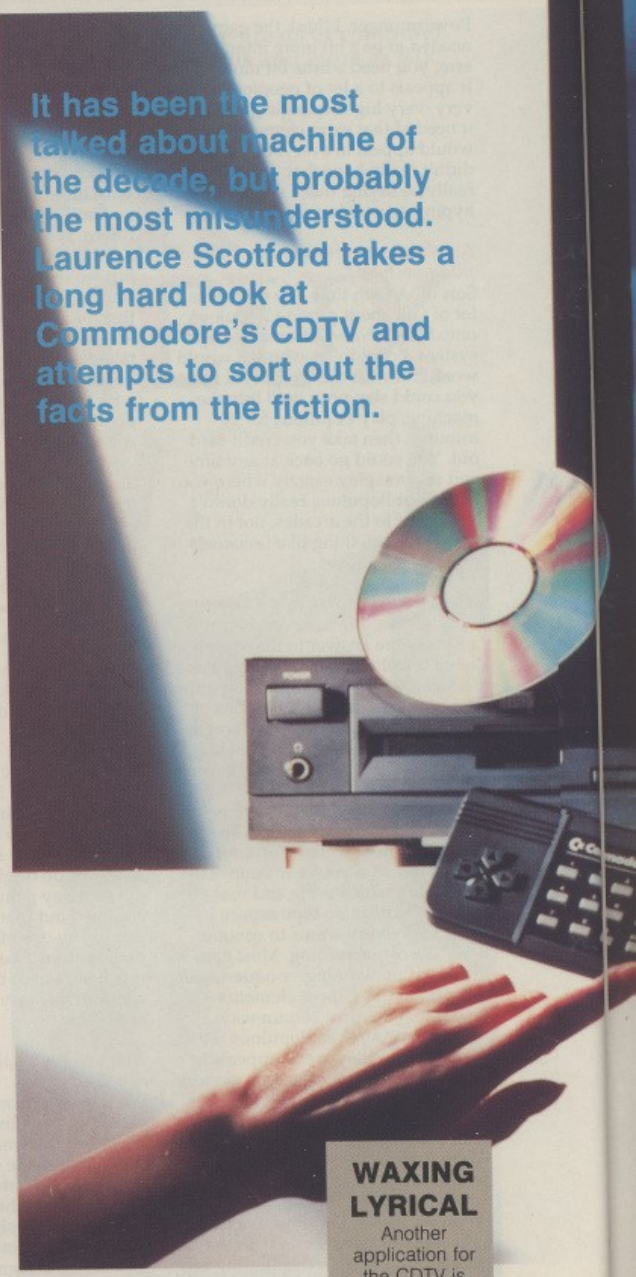
Describe Bullfrog in a single sentence.

Disorganised but keen.

MOLYNEUX ON MOLYNEUX

Age: 31.
Born: Beckingham, Kent.
Earliest Memory: Hitting my pregnant mother on the head with a ball.
Parents: My father worked for an oil company and between the time when I was nine and fourteen, my mother owned a toy-shop. Now that sounds like any kid's dream, but I can tell you it was terrible. At Christmas I didn't get the really nice presents, I got the presents that either didn't sell or had something slightly wrong with them. Perhaps that helps explain my skill at creating games.
Qualifications: A degree in Computer Science from Southampton University.
Previous Jobs: Raspberry picker, kitchen porter at a Torquay holiday camp, marking examination papers and analysing family food trends (by the way, did you know that over a quarter of a million people in Britain have custard for breakfast every week?).
Favourite Movie: A 1930s' French black and white version of *Beauty And The Beast*, because visually it's the most stunning film ever created. It's also one of the saddest.
Favourite Book: *The Magic Far Away Tree* by Enid Blyton because it was such a wacky idea.
Favourite Year: 1989, because it was a really nice summer, there wasn't any pressure at work and my circle of friends were so compatible.
Most Treasured Possession: A glass bottle that I found at a sort of junk market for 50p.
Future predictions for your favourite TV soap (*Prisoner - Cell Block H*): I think that Bea, the most vicious woman there, will actually become Governor of the prison one day.
Greatest Achievement: Populous, well, Bullfrog without a doubt.

It has been the most talked about machine of the decade, but probably the most misunderstood. Laurence Scotford takes a long hard look at Commodore's CDTV and attempts to sort out the facts from the fiction.



The CDTV is not a computer in the conventional sense. It is a completely new product, with new channels of distribution and a new market. It has not been designed to appeal to traditional personal computer owners, but to a far broader user base. It could be destined to become as popular a consumer electronics product as the video recorder or hi-fi. That these black and white facts have not yet been fully taken on board by many people both within and outside the computer industry, including some supposedly well-informed journalists, is evident from the confused picture of the machine that has been emerging from the computer press over recent months.

So what exactly is the CDTV?

Put simply it is the result of a marriage between state-of-the-art laserdisc technology and tried and tested microcomputer technology. It is a machine that has all the processing power of an Amiga, combined with a storage capacity large enough to hold the **Encyclopaedia Brittanica**. This makes it an ideal tool for any application that necessitates the storage of a colossal amount of data while making access and cross-referencing as easy as possible. The CDTV is the first machine to bring this power within reach of the general public.

What does it look like?

The machine is about the same size and shape as a video recorder, with a slot in which CDs are loaded, and a front panel with a simple LED display and a few function buttons. Unlike a conventional computer there is no keyboard; the user interacts with the CDTV via an infra-red remote controller that looks like a cross between a standard CD controller and a console joypad. Output is through a TV or colour monitor and, optionally, a hi-fi or other external amplifier.

How does it work?

At the heart of the CDTV is an Amiga computer with one Megabyte of RAM and a further two Kilobytes of battery-backed RAM which is used to store the system set-up, time and date, and so on. Also on-board is 512K of ROM which contains the standard Amiga Kickstart 1.3 operating system and a File System Handler that conforms to an International Standard for CD devices, thus ensuring that the CDTV maintains maximum compatibility with commercial CD products that may not be specifically designed for the CDTV.

Instead of a floppy disk drive the CDTV has a front-loading CD drive. Unlike the CD player you may have at home it is not possible to load the CD directly into the drive, instead it fits into a plastic holder which is then fed into the front of the CDTV. Commodore is still to decide whether or not to encourage the sale of software already fitted into holders.

The CD can hold any combination of graphics (either conventional Amiga generated pictures or digitised photographs and diagrams), speech and sound (digitised or digitally recorded CD quality), and controlling software. The data capacity of one disk is a stunning 550 Megabytes (that's roughly equivalent to 700 Amiga floppy disks)!

The data is accessed in exactly the same way your conventional CD player works, by using a laser to read the pits burned into the surface of the disk. Unfortunately this is where the major drawback of existing CD technology becomes apparent. The access and read times for CD are much slower than those for floppy disks and seem interminably slow compared to hard disk speeds. On the pre-production model we saw, most wait times were bearable and became tedious only on a couple of occasions. Commodore is confident that it will have drastically improved read speeds by the time the machine is launched.

What about graphics and sound?

Graphics resolution is identical to the standard Amiga, with the same range of 4,096 colours, and one Megabyte of Video RAM. The sound generation facilities are also identical to the Amiga, but the CDTV also has the capability to output digitally recorded CD quality sound. The capacity of the CD to store sound depends on the rate it was sampled at. There is a necessary trade-off between quantity and quality. For instance, you can store about an hour's worth of CD quality sound (sampled at 44 KHz), and about 14 hours of the worst quality sound (sampled at 6 KHz).

Once the CD is loaded the application starts automatically. Depending on what sort of software you are running, all further interaction with the application is via the remote-control pad. All of the software we saw was self-explanatory in this respect.

THE SOFTWARE FACTOR

Commodore is doing all it can to promote software development during these early crucial months, and is actually funding some titles directly. A development system has been available for some time based on the Amiga 2000 with more development tools currently in the pipeline. As Andrew Ball is quick to point out, "the UK's biggest strength is its software community. They are all very Amiga literate." Because of this wealth of talent, developing for the CDTV is not going to be too much of a logistical problem.

The minimum investment to begin developing is around the £5000 mark, but this is money well spent when you take into consideration the fact that CDs are as good as pirate proof! The price of most initial software is likely to be between £20 and £50, depending on the application and anticipated sales, and that's certainly not bad when compared to conventional disk-based software.

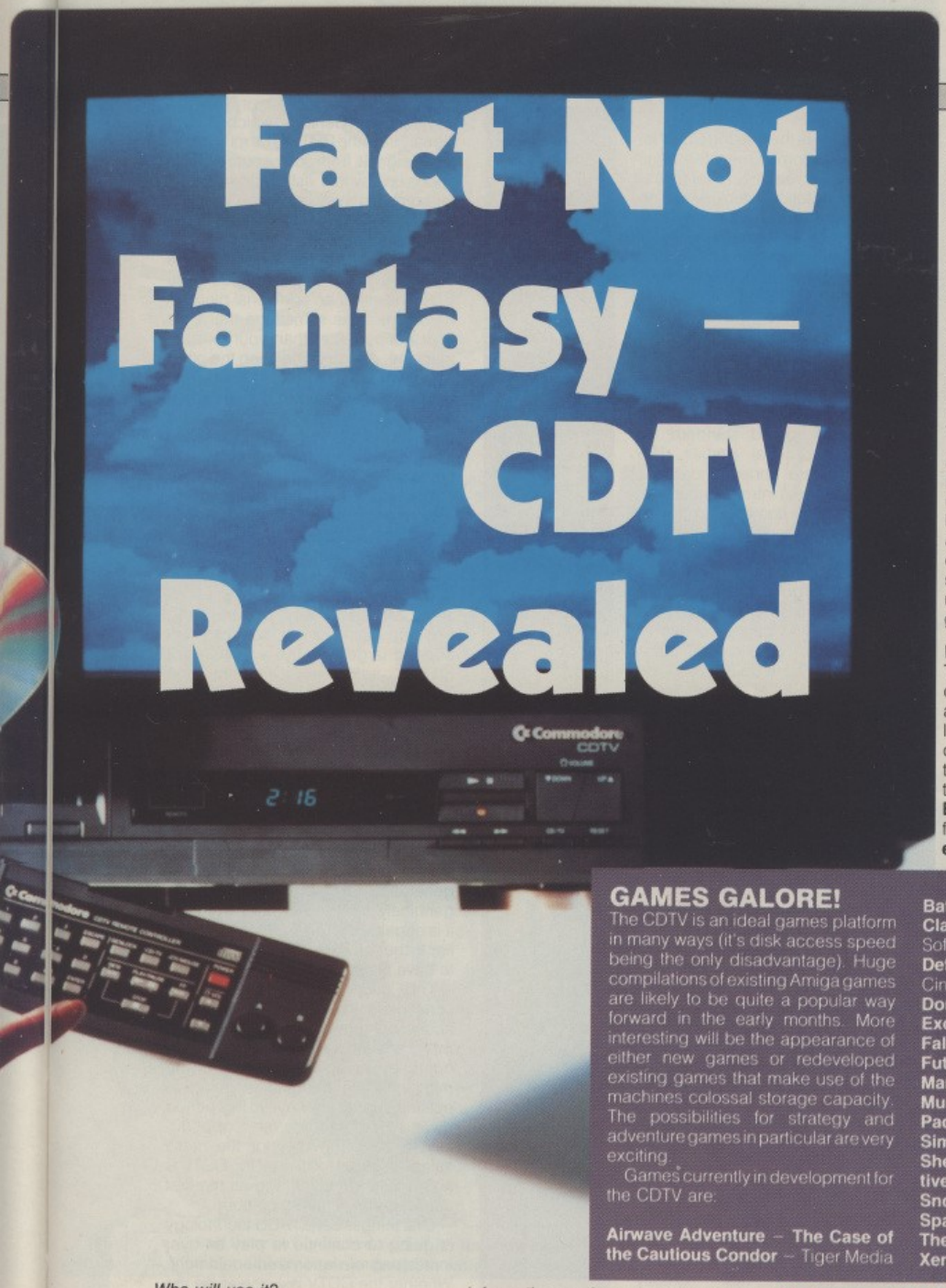
New CDTVs will almost certainly come bundled with a Welcome Disk and possibly additional free software – Commodore want to accentuate the 'plug in and go' aspect of the machine.

Probably the most exciting CDTV software is going to be projects involving some cross-fertilisation of skills in different media. When book publishers, musicians, video technicians, artists, and programmers start pooling their respective skills what can't be achieved?

WAXING LYRICAL

Another application for the CDTV is CD+G. 'What's CD+G when it's at home?' you might well ask. Compact Disc plus Graphics is the answer. Put a CD+G disc into the machine and not only do you get a whole album of CD quality sound, your monitor displays lyrics and suitable images at the same time!

Fact Not Fantasy — CDTV Revealed



Who will use it?
Commodore see the CDTV as catering to three main markets, each of which will want to use it in completely different ways:

(i) BUSINESSES – will find use for it as a training tool. The simple user interface will allow employees to easily explore databases covering all aspects of the company they work for. It will be a simple matter for them to highlight quickly the areas they are weak on while skipping past those they are already familiar with.

The CDTV also makes an ideal Point of Information terminal. Set up so that customers can access them, one or more CDTVs can hold a variety of information on the company's activities and services. Ultimately we may see customers with CDTVs at home using them via a modem as a direct link to the companies they are dealing with. Imagine, for instance, having a catalogue on disk. This could hold price and size information as well as several static colour pictures of each item. Once you had made a selection it would be a simple matter to transmit your order down the phone-lines direct to the catalogue company.

(ii) EDUCATIONAL ESTABLISHMENTS – will find hundreds of uses for the CDTV, which is an ideal teaching medium. It can hold huge amounts of easily cross-referenced data including text, diagrams, digitised photographs, and sounds, and it is simple to use, even for children at Primary school. There are few subjects that would not benefit from use of the CDTV is some capacity, and now that the National Curriculum is in force it is an easy matter to create educational databases that every school can use.

In higher education the CDTV becomes a powerful research tool. Polytechnic and University students will have access to expert systems and databases which they can cross-reference to check up on their own work.

(iii) CONSUMERS – are the final market, and the most important. The number of uses for the CDTV in the home ranges from an early learning aid for young children, through an entertainment platform for playing sophisticated games to a database unit covering such subjects as gardening and cookery.

What is the software like?
There are currently 46 official titles in development, and at least 25 of these are expected to be ready in time for the launch. They cover home reference, childrens entertainment and education, leisure, and games. Individual titles range from **The King James Bible** to **Advanced Military Systems**, from an interactive version of **Cinderella** to a Cookbook.

GAMES GALORE!

The CDTV is an ideal games platform in many ways (it's disk access speed being the only disadvantage). Huge compilations of existing Amiga games are likely to be quite a popular way forward in the early months. More interesting will be the appearance of either new games or redeveloped existing games that make use of the machines colossal storage capacity. The possibilities for strategy and adventure games in particular are very exciting.

Games currently in development for the CDTV are:

Airwave Adventure – The Case of the Cautious Condor – Tiger Media
Battle Chess – Interplay
Classic Board Games – Merit Software
Defender of the Crown – Cinemaware
Dominion – Dominion
Excalibur – Virgin Mastertronic
Falcon – Spectrum Holobyte
Future Wars – Interplay
Many Roads to Murder – Vent
Murder Anyone? – Vent
Pacmania – Domark
Sim City – Maxis
Sherlock Homes, Consulting Detective – Icon Simulations
Snoopy – The Edge
Space Quest III – Sierra On-Line
Thexder – Sierra On-Line
Xenon II – Mirrorsoft

Xenon II is one of the first games to get the CDTV treatment – more graphics, better sound – no doubt there will be many more.

We looked at five of the titles in development:

A Bun For Barney
(Multimedia Corp)
An interactive story for young children. It tells the story of how Barney the Bear sets out to enjoy a quiet lunch (his iced currant bun), but ends up encountering lots of other creatures. The story has animated illustrations and the text is shown on screen in large easily readable type with narration by Tom Baker. Children interact with the story via a wand which can be moved around the screen to point at objects and set off additional animation. The wand is also used to turn the page when the child is ready.

Dr. Wellman, Family Medical Advisor
(Digita)
An example of the sort of home database we can expect to see forming a substantial part of the available software for the CDTV. A wide range of medical topics can be accessed providing information on everything from vaccinations required before travelling to certain countries to alternative medicine. most entries have illustrations and spoken commentary.

The American Heritage Encyclopedic Dictionary
(Xiphias)
A powerful reference tool that holds encyclopaedic information on a wide range of people, places, and landmarks. Searches can be conducted from keywords, or even parts of words. Once found, you can have the entries spelled out or read to check pronunciation. All of the entries are extensively cross-referenced, and the CDTV keeps track of your searches making it easy to backtrack.

Time Table of Science & Innovation
(Xiphias)
An educational/reference tool which holds a comprehensive range of information on Science and Technology from the beginning of recorded history up to the present day. Information is presented both visually and aurally, and, once again, the entries are extensively cross-referenced.

World Vista Atlas
(Applied Optical Media)
Another superb example of the power of the CDTV. Not only are maps of all the countries in the world stored on the disk, you can also reference maps of most of the major cities. Once you have accessed a particular country you can call up digitised colour photographs showing examples of the landscape, examples of music, and political, geographical, and social details. World Vista Atlas is going to be an extremely useful educational tool.

What next?
As impressive as the existing CDTV is, there's more to come. One of the terms that's been bandied about over recent months is Full MotionVideo (FMV). The trouble is, not a lot of people know what it means. Full Motion Video is the ability to display complete frames of video data at the correct rate (50 frames per second on a PAL system). FMV is not currently available on the CDTV. It's not available because there are two problems. One is that the hardware isn't quite up to it yet, and the other is that manufacturers of CD equipment have yet to come up with an internationally agreed standard for FMV, and individual parties, like Commodore, are understandably a little hesitant about introducing it until that agreement comes into force. Hopefully FMV should become a lot more than flash jargon in a couple of years or so.

Once you've got your basic CDTV (which you will recall looks nothing like a computer), you can plug lots of things into it to make it look like a computer. There are both Centronics (Parallel) and RS232 (Serial) interfaces for hooking up printers, and communicating with other devices. You can plug in a standard Amiga floppy disk drive (which will only be of use if the software supports it). Interestingly there is also full MIDI support, which should make for some interesting music packages: Playalongamax perhaps? What an awful prospect!

One feature you won't find on an ordinary Amiga is a smart card slot. This accepts a credit card sized magnetic device which is able to store small amounts of data permanently. This will allow the user to take information about their use of applications away from the machine. For instance you could store positions of useful entries in a database so that you could access them more quickly the next time you switched on the machine, or keep track of your score in a game or position in an adventure game.

The beauty of this system is thatyou can stop working on one CDTV and carry on from where you left off on a completely different machine by transferring the smart card.

Another slot that greatly increases the potential power of the CDTV is the Intelligent Video Slot. This has been designed to accept devices like Genlock which allows signals from the CDTV to be mixed with video signals from other sources. This opens up a whole vista of possibilities for combining video footage with text and commentary controlled by the CDTV.

If you are an Atari owner then you are obviously going to be interested in the CDTV as either an additional piece of hardware or as something that suits your needs better than your existing machine. Amiga owners, on the other hand, will be delighted to know that Commodore is currently planning a bolt-on CD system for the standard Amiga, which will be a cheaper option for those wanting to explore multimedia. Any future CD machines from Commodore are going to be downwardly compatible with the existing machine so upgrades will not entail a change of software.

In Conclusion
The CDTV is a very powerful and exciting tool, but its success will depend largely on the availability of quality software. Currently the machine seems to be attracting a lot of interest from third party developers, and that can only be a good thing for the consumer. Commodore's problem, now that it has the machine up and running, is how to convince the general public of its worth.

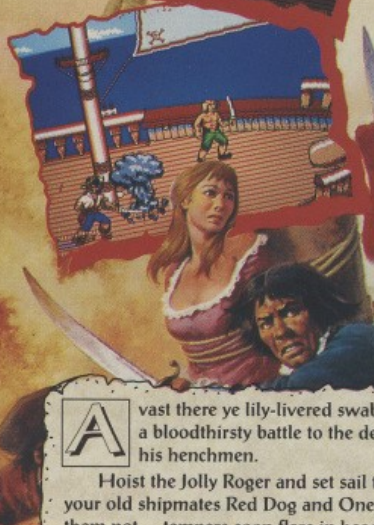
"The CDTV," says Commodore's PR man Andrew Ball, "has to be perceived as something as simple as the next generation of CD player. People genuinely don't know what it is or what it is capable of. The key to its success lies in the software: every user is going to have his own little software niche."

The difficulty is in convincing consumers that the CDTV "isn't an accessory to a child's bedroom", but rather something that the whole family can use. During the first year of the machine's life demand is going to outstrip supply anyway, so this period gives Commodore an opportunity to pave the way for the mass sales that need to follow if the CDTV is not to lose its advantage as the first affordable multimedia platform.

One thing is certain: CD technology is going to continue to play an ever increasing role in home entertainment. Whether the CDTV is going to be the most successful player in that revolution remains to be seen.

The CDTV in all its glory. It may look like a common or garden CD player, but it's a hell of a lot more...

Skull & Crossbones™



A vast there ye lily-livered swabs! It's time to prove your manhood in a bloodthirsty battle to the death with the Evil Sorcerer and his henchmen.

Hoist the Jolly Roger and set sail through strange and exotic lands with your old shipmates Red Dog and One Eye. Shipmates they may be, but trust them not ... tempers soon flare in head to head clashes over the spoils of your piracy.

Skull & Crossbones is the most blood-curdling arcade game on the market – not for the faint-hearted! Blood flows, razor-sharp cutlasses hack through the flesh of hideous opponents, arms and legs are ... AAARGH ... it's just disgusting!

There's treasure, jewels, gold and lusty wenches to be captured and ghastly creatures to be stabbed.

It's a rough and dirty job – and we all want to do it!

MORE SAVAGE THAN BARBARIAN ... MORE BLOODY THAN PRINCE OF PERSIA... MORE LAUGHS THAN ... NEW PRINT SHOP!

Get it now – but don't, *please don't* show your grandmother.

TENGEN
The Name in Coin-Op Conversions

© 1991 TENGEN Inc. All rights reserved. ™Atari Games Corp. Artwork &Packaging
© 1991 Domark Software Ltd. Published by Domark Software Ltd, Ferry House, 51-57 Lacy Road, London SW15 1PR Tel: 081-780 2224. Programmed by: Walking Circles
Available on: Amiga, Atari ST, IBM PC 3.5" & 5.25", Commodore 64, Spectrum, Amstrad.
Amiga Screenshots.

DOMARK

THE THRI

Vektor Grafix is widely regarded as one of the top 3D specialists in the country, but the road to fame has not been an easy one. Alastair Swinnerton relates its rags to riches story.

THE PRODUCT THAT PUT THE NAME VEKTOR GRAFIX on the lips of 16-bit games players everywhere was undoubtedly Activision's impressive multi-plane flight simulator Fighter Bomber, but the company's impressive history began long before that particular game hit the shelves.

Vektor Grafix has always been very much led from the front by its owner and chief creative talent Andy Craven, a bearded, stern-eyed and strong-minded Northern programmer. It was he who guided the team through early projects such as the coin-op conversions of the now-legendary Star Wars and The Empire Strikes Back f or Domark.

However, by the Summer of '88, with success on its doorstep and Andy Craven now spending much of his time chained to a development system, it was time that Vektor Graphics had a business manager. That man was to be John Lewis, who had previously been with Cascade Games (which went on to become Artronic).

Shortly afterwards the company won the coveted contract to produce Fighter Bomber for Activision, for an allegedly record set of advances. Things were certainly looking up.

Unfortunately life wasn't all sunshine and roses for long. The project was hampered by delays which caused financial complications. This project caused so much frustration that when it was finally released to general acclaim, Lewis decided to call it a day.

Meanwhile, back at the ranch, Craven decided it was time to do a little rationalisation of resources, pull in the belt a little, curtail the world domination for a while and get down to some serious game producing.

The team's next project, Killing Cloud, a futuristic 3D action/adventure game with simulation aspects, gained the company more critical accolades when it was released on the Image Works label. Then, as we reported back in Issue 29, its current simulation, Space Shuttle, has already caused a lot of enthusiastic noise even before its completion.

So what else is happening at Vektor's Leeds offices?

Quite a lot actually. The current workload includes XF-50, a hyper-realistic space-based flight simulator, and Death Or Glory, an across-the-eras piece that simulates everything from World War I to the Falklands.

What makes both these games interesting is the amount of artificial intelligence packed into them. Craven explains: "A long time ago we realised that the future of flight simulation was heading towards war-gaming, with more strategy and gameplay. At that time the publishers weren't too sure about this, but with the advent of Midwinter, Conflict Europe and so on, they soon began listening."

Despite having a wealth of product in the pipeline, and like any software developer that wants to survive the recession, Vektor has realised that computer games can't be the only outlet for the team's creativity. Perhaps more importantly they have recognised that the games and film industries are now inextricably linked.

With the onset of vastly increased memory capacity (especially with the imminent availability of affordable CD-based computing) more and more detail is becoming possible, and computer games will have to become even more like interactive films if they want to hold the attention of the buying public: no longer is it enough to turn a film licence into a 2D scrolling arcade conversion lookalike. Consequently, interactive films are one of the areas of expansion that the Vektor crew are currently investigating.

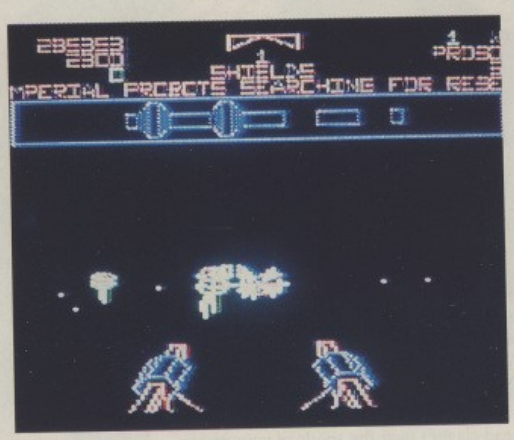
One of its current projects, Mechwarrior II (a version of the well-known board game, Battletech), uses a new in-house very detailed backgrounds. It is not such a giant step from this to the sort of realistic 3D human figures that would populate an interactive film.

Such diversification requires more than just development money though, it needs a greater understanding of potential future requirements: not all projects give an immediate pay-back. The cartoons seen here are an example of this. Initially drawn by John Guerin, one of Vektor's three artists, they inspired Andy to commission a full-length promotional comic strip for Killing Cloud.

Another pie which Vektor has its fingers well and truly dipped into is SNASM, the popular development system which it designed in conjunction with fellow Yorkshire team Realtime Games under the 'Crossproducts' banner. This is rapidly becoming an industry standard 3D tool.

In fact, the maxim that states 'if you want something well

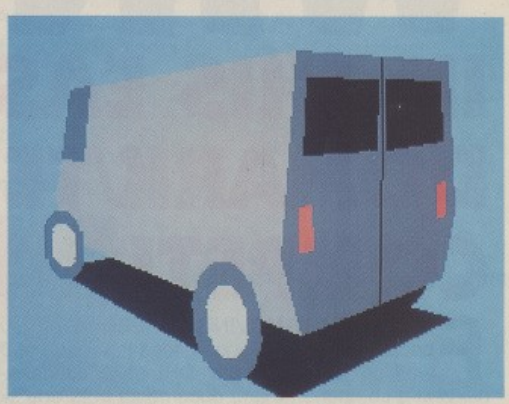
STAR WARS **AND** THE EMPIRE STRIKES BACK**, converted from the popular Atari coin-ops, were two of Vektor Grafix's first masterpieces - and a small taste of things to come.**



A FLIGHT SIMULATION THAT FEATURED SEVERAL PLANES and some impressive 3D, Fighter Bomber **was the game that really put Vektor Grafix on the map.**

ILLING CROWD

VEKTOR GRAFIX'S ARTISTS had an opportunity to show off their skills in the Killing Cloud comic.



ONE OF THE OBJECTS from Vektor Grafix's most recent game, Killing Cloud. The 3D routines in this game are notable for their ability to handle curves.

WHEN VEKTOR PRODUCED Fighter Bomber, Andy Craven took flying lessons to give him a better idea of how aircraft really felt to fly. As this cartoon shows, he may initially have found civilian planes a little disappointing...

THE VEKTOR GRAFIX TEAM in their Leeds office, with Andy Craven third from the left.

done, do it yourself' seems to have been taken to heart by Vektor Grafix: as well as SNASM and the articulation editor, it has sprite animators, parsers and a whole host of development tricks to keep it ahead of the field in 3D.

Its newest and cleverest piece of programming wizardry is a little gadget called COCO. COCO is basically an artwork translator which takes 256-colour screens and converts them automatically to 16-colour versions, or vice versa, as well as handling a whole host of other formats. As if that weren't impressive enough it also compresses files.

Then, of course, there's Virtual Reality, the current industry buzz-word, and something which Vektor is certainly not ignoring. Since it was first mooted as a games medium some two years ago, VR has taken the public imagination by the throat. The timescale of 10 years until commercial viability is attained has been reduced drastically too.

If things keep on at this rate, the very term 'computer game' may soon need redefining. In fact this new media will be neither film, TV, video or computer game, but a brand new entertainment media, and Vektor is determined to be there when it happens.

WIN! A LUXURY YACHT IN THIS EASY-TO-ENTER DOMARK/TENGEN COMPETITION

FANCY A FAST-MOVING CAREER? Well you could be in luck, because the way Tengen sees it, *the* job of the future will be working for a futuristic DHL-style courier – only instead of delivering components and documents from one side of the world to the other, your job will be more along the lines of taking secret packages on a death-defying mission through enemy lines.

Following an illustrious line-up that includes such coin-operated notables as *Hard Drivin'* and *Klax*, Tengen's latest, *Hydra*, puts you at the wheel of a high-powered, heavily-armoured Hydracraft, powering your way through nine levels of action in an effort to deliver those all-important packages.

As ever, the conversion is being brought to you by those clever coding chappies at Domark, who hope to recreate exactly the coin-op's fearsome line-up of enemy boats, jet-skis, zeppelins, choppers, fighters and hovercraft all coming at you against a digitised background.

But for those of you who can't wait for Hydra to make it to your screen, why not get in a little fast-boating practice by taking part in this easy-to-enter competition?

Domark is offering the fabulous 'Christina' a 1/24 scale remote-controlled pleasure yacht (so realistic that it's even got a fully-working bilge-pump!) to the lucky winner, but not only that, eight runners up will each receive a 'Dolphin'! Slightly smaller than the Christina, the Dolphin is a 1/30 scale recreation of a pleasure boat designed for use in pools and ponds.

So if you fancy a life on the ocean wave, simply answer the following three questions, and send your entry on the back of a postcard (or sealed envelope) to **Watery Winner, The One, EMAP Images, Priory Court, 30-32 Farringdon Lane, London EC1R 3AU**, to arrive no later than May 9th 1991.

1. Which of the following coin-ops was also converted to computer by Domark?

a) Escape From The Planet Of The Robot Monsters
b) Golden Axe
c) Super Hang-On

2. Which previous Domark game also featured water-based shooting action?

a) Spitting Image
b) MiG-29 Fulcrum
c) Live And Let Die

3. Which famous coin-op hardware company is responsible for the Tengen range?

a) Taito
b) Bally
c) Atari

THE SMALL PRINT

The editor's decision is final and correspondence will be entered into, winners will be published in a future issue of *The One*. Employees of EMAP and Domark (and their relatives) may not enter. No cash alternative will be offered in place of any of the prizes.

No PC Graphics Here.

As everybody knows, many Amiga games aren't really Amiga games at all. They're PC games in disguise. But now Accolade introduces three awesome games that definitely are "Made in Amiga." That means enhanced 32-color Amiga graphics. Great Amiga sounds. Hot Amiga music. And dazzling Amiga animation. If you're looking for 100% pure Amiga adventure, Accolade has three graphic examples.

"Les Manley is a bit of a nerd"
- What Personal Computer

"A wicked role playing game with outstanding graphics"
- Zero

"Charismatic and highly rewarding"
- Strategy Plus

The look and feel of a Graphic Adventure with the depth of an FRP. Totally icon driven. Over 100 hours of frighteningly realistic gameplay. Help Elvira solve the terrible secret of her 800-location castle.

As the skinny but heroic Les Manley, your task is to find the greatest, most elusive entertainer of all time, win a million dollars -- and the affection of your boss's secretary who doesn't know you exist.

One minute you're watching TV, the next you're sucked into a parallel universe of gorgeous artwork and clever animation. Your quest? Save this remarkable world from destruction.

To order write or call:
Accolade Europe Ltd.
50 Lombard Road
London SW11 3SU
(071) 738-1391

Elvira image © 1990/1991 Queen "B" Productions. Elvira and Mistress of the Dark are the trademarks of Queen "B" Productions.

FLYING TONI

PROJECT
Air Duel

PUBLISHER
MicroProse

AUTHORS
Glyn Williams (Design and code)
Martin Moth (Project management and additional design)

INITIATED
October 1990

RELEASE
August 1991

Gordon Houghton dons his flying jacket, starches his scarf and samples high noon at high altitude.

IT'S A FAMILIAR STORY. Programmer on the rebound meets software house, they fall in love and spawn a child. In this case the programmer is Glyn Williams, and the gleam in his eye was a 3D dogfighting game called *Fokker*. After experiencing some difficulties in his relationship with Activision (for whom he produced *Warhead*) he turned to MicroProse, who gave life to his project and allowed it to grow. Together they christened the new, improved version - *Air Duel*.

A combination of fighter aircraft and the MicroProse tag usually means one thing: an in-depth bells-and-whistles combat simulation. But that's not the case this time, as project manager Martin Moth explains: "You can't really term it a simulation, because there isn't enough happening at ground level: while the world you're in is realistic, it's not totally accurate. It's also not mission-based, it's simply a contest between two aircraft - you and the enemy."

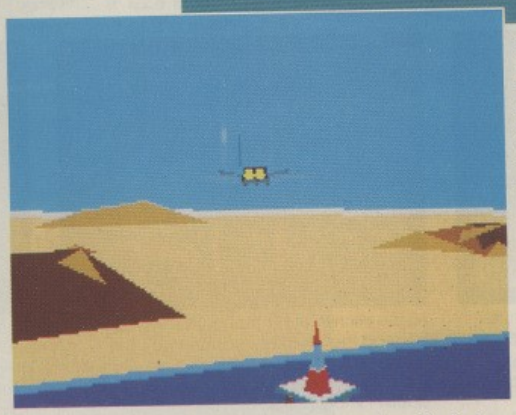
Further evidence of this arcade-style approach is its planned appearance on the MicroStyle label - Moth sees it as similar to previous releases under that flag, such as *RVF Honda* and *Stunt Car Racer*: "There are elements of realism in there to make the gameplay fun, but the basic aim is to get up, shoot the enemy, and get down again."

In principle it's similar to *Air Combat*, one of Atari's first ever coin-ops, released in the late 1970s, where a variety of ancient and modern planes with equal weaponry duelled for supremacy of the skies. Add an extra dimension, switch to first-person perspective and create realistic flying conditions, and you've got the essence of Air Duel.

There's a quartet of scenarios featured - two World Wars, the jet age and outer space - the landscape of each designed to convey the atmosphere of the period. For example, the World War I scenario is mostly made up of grey tones, for that genuine 'early morning over the Front' effect.

The combatants in this first duel are the core of Glyn's original game: a Fokker DR1 Triplane and a Sopwith Camel. The World War II backdrop is the Pacific Islands, switching the action from land to sea and starring a Mitsubishi A6M Zero versus a F4F-3 Grumman Wildcat. However, if you prefer the roar of turbines and the smell of hot metal, the present day scenario features a McDonnell-Douglas F-18 Hornet and a MiG-29 tussling over the Gulf. Then there's space, the final frontier, a riot of space stations, girders, and two (as yet unspecified) combat vehicles.

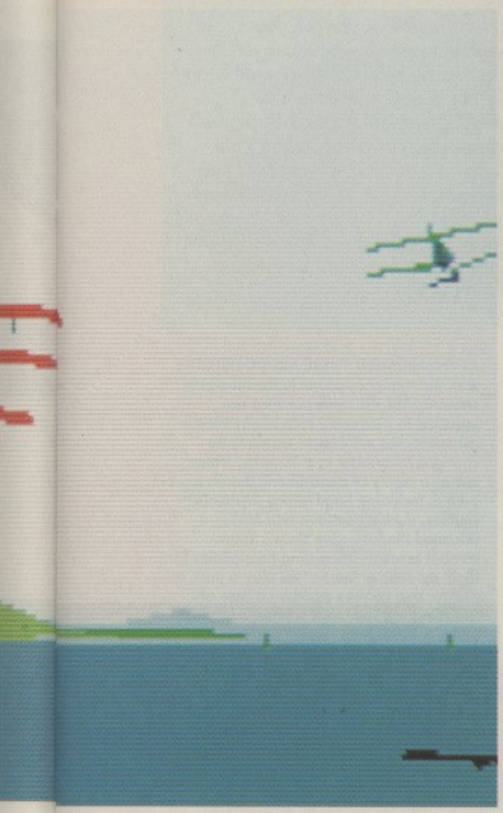
Out-and-out dogfight games are a rare breed - Martin Moth can only recall a couple of noteworthy efforts: the classic C64 Mirrorsoft title, *Spitfire 40*, and Image Works' vector-based

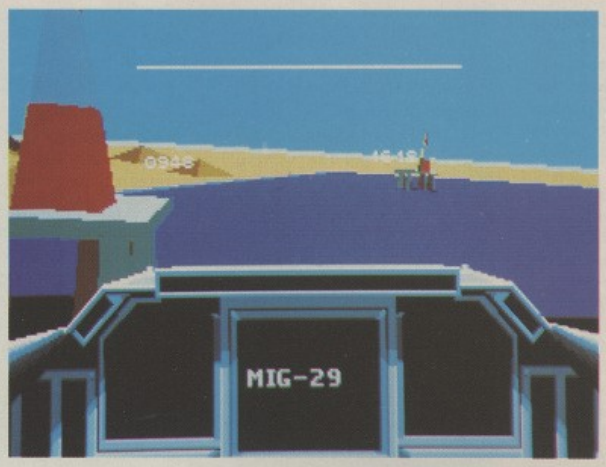


ONE CONCESSION TO REALISM is that all of the aircraft feature accurate flight characteristics: it will be much easier to stall and more difficult to gain height in this WWI Fokker Triplane than it would be in the Wildcat, and the F-18s can indulge in vertical climbs and fancy manoeuvres. One thing that may surprise MicroProse fans is that this will be a purely apolitical game: the Triplane, as you can see, has no nationality markings. This decision to exclude political details also results in a faster screen update and a more manoeuvrable plane.

TO FREE WILLIAMS from some of the spade-work of design, Moth is currently modelling each of the six real and two imagined aircraft on a computer. The process begins with original drawings which he converts into a series of points and faces for the front, side and top views, all on graph paper. These are then transferred onto a PC, with each design taking about 10 days to complete. Because the nature of the game keeps the land detail to a minimum, there is more room for detail on the aircraft themselves. Once the graph paper version has been transferred to the PC, it undergoes Binary Space Partitioning: this is a way of depth-sorting all the polygons, so that you only see the faces you are meant to see. Once the colours and the x/y/z coordinates have been checked, the finished aircraft design can be downloaded onto Glyn's machine.

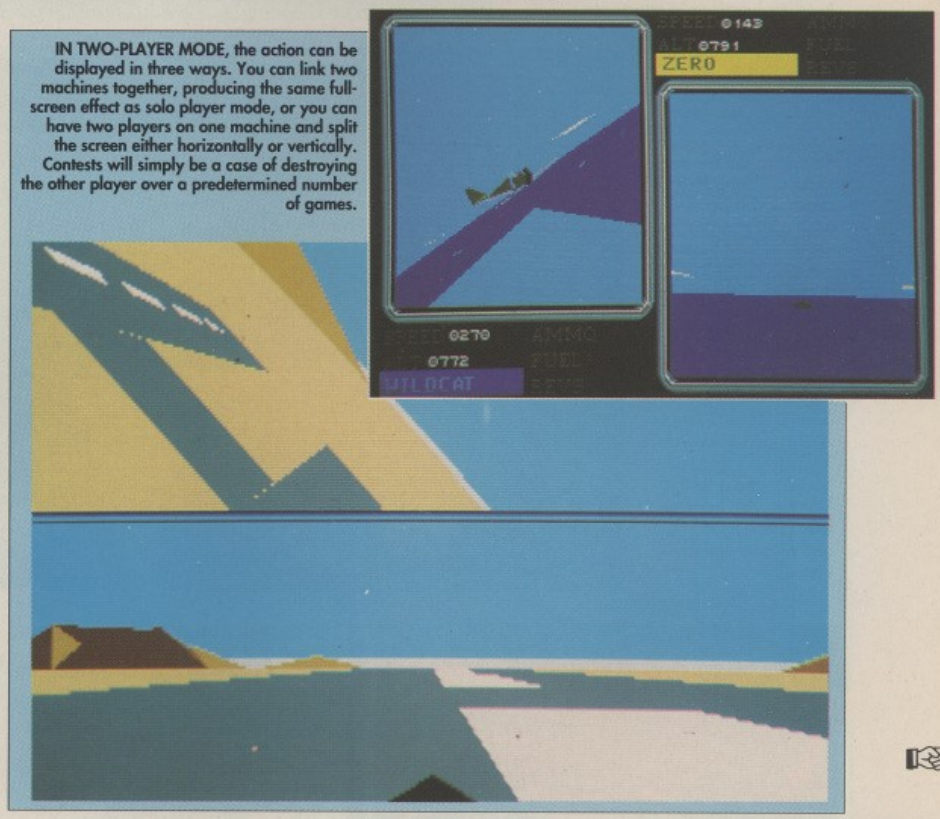
IGHT





TO HELP YOU ORIENT YOURSELF in the sky, *Air Duel* incorporates reference points such as the sun and clouds, and a natty little 3D cueing system in the cockpit. This is actually an arrow borrowed from the F-15 arcade machine, which changes shape so that it always points towards the enemy. For example, if the arrow is squat and pointing upwards, the enemy is straight ahead; if it's long and pointing down, the enemy is behind you.

IN TWO-PLAYER MODE, the action can be displayed in three ways. You can link two machines together, producing the same full-screen effect as solo player mode, or you can have two players on one machine and split the screen either horizontally or vertically. Contests will simply be a case of destroying the other player over a predetermined number of games.



Sky Chase: "Sky Chase worked because it was so fast and playable, although it would have been nice to have had polygons. Spitfire 40 had polygons, but it was too slow."

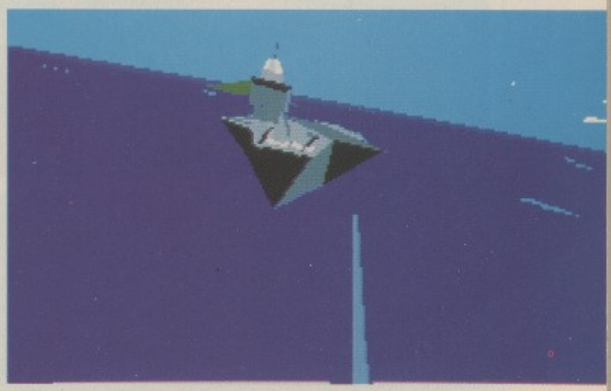
The aim with Air Duel is to achieve a compromise of realism and playability. The key word is 'chuggy': "You can get down almost to chuggy; but there's a fine line between chuggy playable and chuggy unplayable. You want responsiveness without having to think about it."

One of the most vital aspects of any one-on-one game is the difficulty of the simulated opponents, a factor which Moth and Williams haven't overlooked: "The quality of computer combatants will vary according your ability. Every time you achieve success the computer analyses your performance: the better you get, the smarter the opponent you face."

However, this difficulty won't be graded according to the scenario: you'll be able to choose any of the four combat scenes from the options screen, and each will initially feature similar conditions. Do well in single-player mode and your achievements are saved to disk. Typically, the computer records the terms in which you achieved a high score, so that your tally will be accompanied by information that you were a novice pilot with unlimited fuel in realistic flying conditions.

This leads to the range of options already penned in. The basic elements include single and two-player modes - with either player controlling either aircraft in any scenario - and realistic or arcade-style flight characteristics.

These two flight modes have been with the project since its inception: Williams always intended to have accurate controls for flight sim buffs and arcade controls for the fast food brigade, where specific joystick actions lead to



manoeuvres such as rolls. MicroProse is also considering including limited and unlimited fuel supply options, optional navigation aids, rewards for stunts and other bonuses. The point of all this is that if an expert pilot plays a novice, a system of handicaps makes the fight fairer.

The flight mechanics are currently in development, a compromise of Williams' programming and Moth's own flying experience. Moth is an old hand with MicroProse's very own plane, a four-seater Piper Warrior. "Flying an aircraft is actually quite simple," he points out, "the difficult part is learning the instrumentation and rules." This experience has helped shape Glyn's flight model, which was initially too sensitive to joystick control, and had an auto-levelling function: "It effectively restricted you to driving around on one level without using the verticals."

The ultimate criterion is playability, as Moth explains: "It's all down to speed. Masses of depth and super-intelligent enemies would detract from the action. One of the interesting features we discovered about Dynamix' Red Baron was that when you go into combat it cuts out about 75 per cent of the ground detail. All you really need when you're fighting is a reference horizon and a few features - we hope you won't have time to stop and admire the scenery."

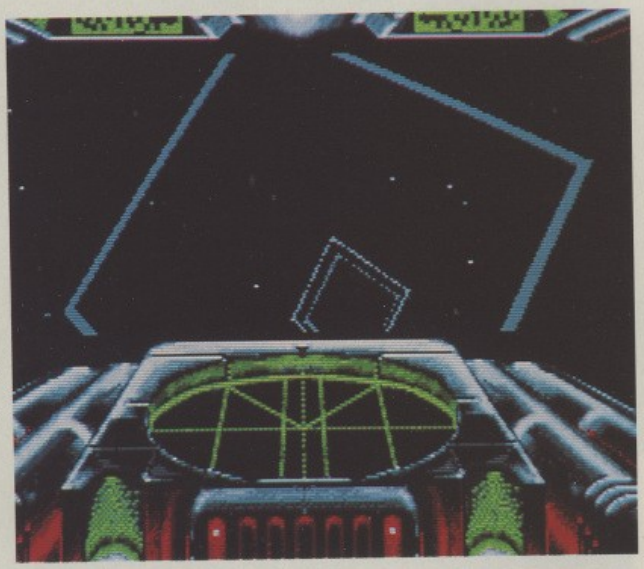
THE ART OF COMPROMISE

JUGGLING THE DEMANDS of frame rate and realism is one of the key problems in *Air Duel*, more so than in most flight games because your success relies on flying prowess rather than high-tech weaponry.

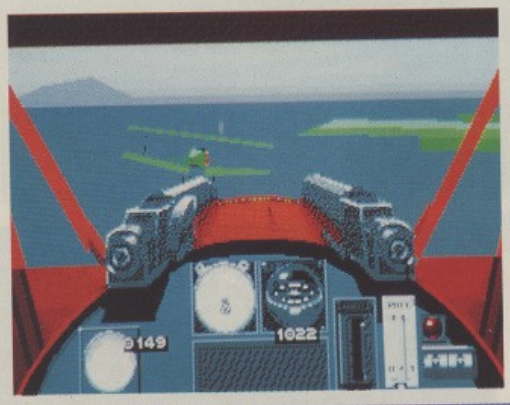
MicroProse hopes to achieve a minimum final running speed of six to seven frames per second - at the moment, with debugging routines in place, it's running at around three to four. Simplification is the answer: there will be a maximum of 16 colours, and in two-player (split-screen) mode, a lot of the detail will automatically be removed.

The need for speed wasn't the only playability problem to be solved: if the scale of the aircraft was accurate, most of the time you would only see a dot on the horizon because the screen resolution isn't fine enough. As a result, from the cockpit viewpoint all the planes are approximately eight-times their normal size. However, when you switch to any one of the external views, the scale reverts back to normal - so that you don't, for example, have an aircraft that appears to be half the size of the carrier from which it is launched.

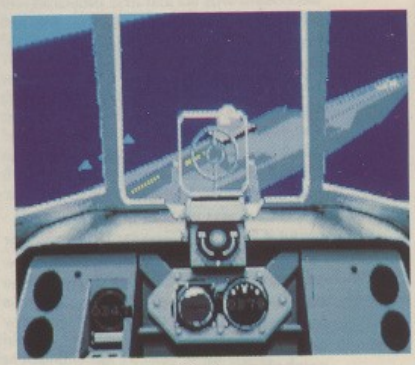
One final key feature which sacrificed realism to arcade action is the plane's shadow. This is intended to give an impression of height, and always appears in front of you, whichever direction you fly in and wherever the sun is in the sky.



AT THE MOMENT THERE ARE DIFFICULTIES with the reference points in the off-world scenario. The dots you see here are intended to give some idea of direction in 3D space, but will almost certainly be changed "probably to a 3D grid." There are also plenty of atmospheric details to be added, including huge girder structures, shuttles, docking stations and MMUs (Manned Manoeuvring Units). Space combat presents interesting possibilities for flight modelling: inertia will play a part, so that turning corners could be a case of 'skidding' as your craft rotates, and you will also be able to reverse at the same speed as you move forwards. Each craft will be launched from a space station, either head-on or from remote points in the playing area. Design details haven't been finalised, either internally or externally, though Moth favours an *Elite*-style display and a green glow for the instrument panel.



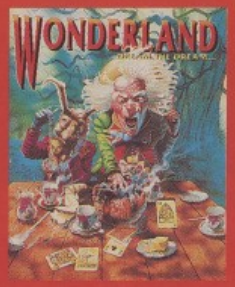
IN KEEPING WITH THE PURE DOGFIGHTING elements of the action, there isn't a vast array of high-tech weaponry available: machine guns appear in the two World Wars and present day scenarios, missiles appear in the present and laser bolts and plasma cannon turn up in the space age. There will probably be an option to replenish or even increase your firepower by performing stunts. Shooting down an aircraft is appropriately spectacular: it bursts into flame, smokes and then explodes, with plane parts flying everywhere. There should also be a replay option after a kill which cuts to an external view of the aircraft and relays the final few fatal seconds.



GROUND OBJECTS will be kept to a minimum in the heat of battle, but they will be included in other aspects of the game. For example, you will be able to watch the Wildcat launch from its carrier, and there will be plenty of islands and runways to land on, bunkers, bridges and hangars to destroy or fly through, and even features found in the F-15 coin-op, such as oil-rigs and refineries. As well as being decorative, you could opt to turn them into stunt objects: for example, you could decide that flying under a hangar would immediately refuel the aircraft, or simply gain you extra points.

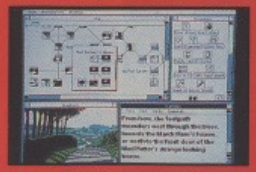
GLYN WINS HIS WINGS

GLYN WILLIAMS HAS AN ECLECTIC TASTE in computers: as well as mastering all of the 16-bit machines he's digested a Wang, an Apple, a BBC, and a C64. His first efforts were all for the C64: an unreleased helicopter game followed by *Cholo* (for Rainbird) and a conversion of *Starglider*. Last year he produced the fruits of two years' labour: the space flight-cum-alien invasion epic, *Warhead*. Not a man to twiddle his thumbs when there's a Fokker to be flown, he also plotted his current project, which makes use of many of the 3D routines found in Warhead.



ANYTHING CAN HAPPEN TO YOU IN WONDERLAND...

IF YOU DON'T WAKE UP!



Virgin GAMES CONCEPTS IMMACULATE

Magnetic Scrolls

WONDERLAND IS NOW AVAILABLE ON
IBM PC • AMIGA • ATARI ST • ARCHIMEDES

© 1990 Magnetic Scrolls Ltd · ℗ 1990 Virgin Mastertronic Ltd

Chuck Rock's peaceful existence has been shattered by the kidnapping of his beautiful wife Ophelia by the evil Gary Gritter.

In his quest to find her, Chuck kicks and belly butts his way through over 500 screens played over 25 comical zones of exciting and addictive gameplay.

AVAILABLE ON
ATARI ST AND
COMMODORE AMIGA
- £24.99

SCREEN SHOTS TAKEN
FROM AMIGA VERSION

CORE
DESIGN LIMITED

Core Design Limited, 60/714 Ashbourne Road, Derby, DE3 3FS. Telephone: (0332) 297797 Facsimile: (0332) 381511

ARMS AND THE MEN

Millenium's forthcoming blaster promises an arm full of trouble. Kati Hamza lets the cat out of the bag.

PROJECT
Tentacle

PUBLISHER
Millennium

AUTHOR
Mark McCubbin (Design, Coding, Project Management)
Jimmy Savage (Graphics)
Martin Calvert (Graphics)
Mark Jones (Graphics)
Dick Splash (Graphics)
Steve Wetherill (Sound)
Tim Wright (Sound)

INITIATED
August 1990

RELEASE
June 1991

WHEN THE TOP-CLASS future sports extravaganza *Projectyle* catapulted Eldritch The Cat to stardom last summer, the team consisted of two men and a couple of computers. These days The Cat has bigger fish to fry. In the last 12 months Eldritch has acquired two new directors, moved offices, recruited a handful of staff, lost two directors and blagged software contracts from nine different publishers. Only one of the original twosome - Steve Wetherill - remains: his sometime partner Marc Dawson is currently financing marriage and mortgage as project manager for educational publisher Database. The other Cat to leave the litter was Stefan Walker who's since become a full-time employee of Electronic Arts.

Top on this month's list of imminent Eldritch projects is Millenium's *Tentacle* - a horizontally scrolling shoot 'em up with a spring in its tail. At first it sounds like the usual 'aliens threaten to eat babies and mash your world in 24 hours' scenario. In this case though, the vehicle charged with positioning a series of time pods and blasting seven shades of slime out of everything in between, is no bog-standard fighter plane. What we're dealing with here is a tentacle craft - not only one of the most deadly weapons that ever mutilated mutant organisms, but also one that's kitted out with a smart set of springs or tentacles just right for spanning gulfs and grabbing hold of the most treacherous terrain.

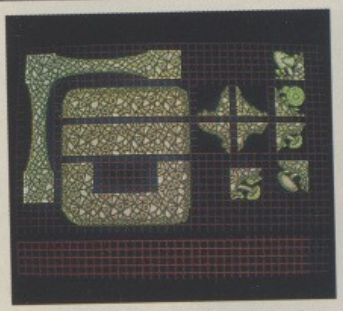
Control is a question of twisting the joystick to increase the momentum of the craft's spin. With a bit of practise the wonder-machine can be twisted right from one corner of the screen in to the other. Mark McCubbin,

THE DESIGN FOR THE ORIGINAL MAIN SPRITE was vetoed by Millenium. "Basically they took one look at it and said that it reminded them of an earring."

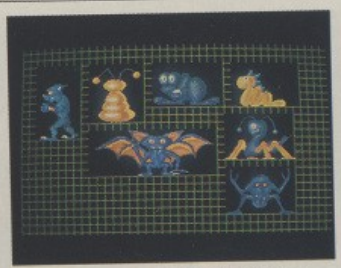
HERO SPRITE MARK 2 is a massive 48x48 pixels big. "Heroes are usually 24x16, just little spaceships. We thought that looked a bit weedy, so we expanded the size."

IN ALL, THERE'S A GRAND TOTAL OF 150 DIFFERENT ANIMATED ALIENS to kill, the biggest, a giant elephant, around 160x128 pixels large. Small creatures fill in the gaps between mega-alien bashing and are designed to link into puzzles.

WITH THE EXCEPTION OF CREATING *OCCAI*, perfecting the movement of the hero craft took by far the longest chunk of development time. "I just couldn't get the springs right." explains Mark. "I had a mental block in actually programming it, so in the end everybody had to chip in and help me out." This picture is taken from an early demo.



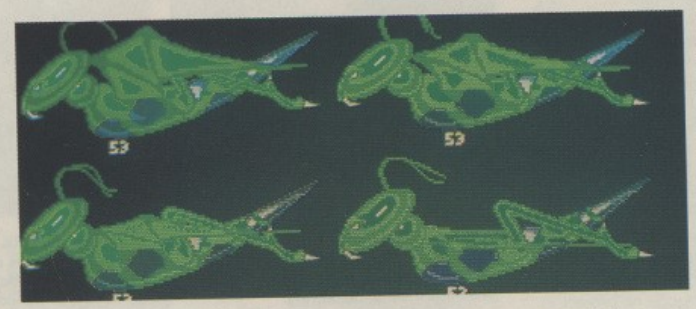
THE LANDSCAPE BLOCKS for each level are designed according to the themes of eight chosen regions: a dinosaur world, a fantasy land, a Roger Dean universe, a *Beast 2* environment, a volcano stage, a *Tentacle* maze, a metal world and one still to be defined. During level-design, the in-house map editor allows blocks like this one to be pushed and shunted about at will.



"WHEN WE FIRST SENT THE GRAPHICS to Millenium they said, 'Make them mean', so Jimmy drew teeth on them all. Then he realised that isn't what they meant." For Jimmy Savage, nowt but a schoolboy before he began drawing pictures for The Cat, *Tentacle* has been a personal learning process. Early practice graphics like this called for "some seriously drastic changes,"; these days he's a veteran at producing exactly the kind of fantasy sprites Mark McCubbin wants.

GRAPHICS

Tentacle's graphics, the responsibility of Jimmy Savage, Martin Calvert, Mark Jones and Dick Splash, are heavily influenced by their collective heroes: Rodney Mathews, Roger Dean and Tim White. Inevitably, this means there'll be certain resemblances to Psygnosis' distinctive graphical style but for McCubbin and Wetherill, this is pure coincidence. "Everyone thinks it's a Psygnosis game at first, but we haven't copied Psygnosis - we just read the same books as they do: *Last Ship Home* by Rodney Mathews and *Chiaroscuro* by Tim White. Reflections' graphics are very popular, but they're not the only ones who like that style. Mark Robinson just happens to draw in the same kind of style as Jimmy Savage - and that just happens to be a Rodney Mathews, Roger Dean kind of style."



BIZARRE, MEAN AND UGLY. The animation designs for flies like this one comes straight out of Jimmy Savage's head. "I just look at a still picture of a Tim White creature and imagine how it moves."

programmer, director and chief designer elaborates: "Originally it was intended for the springs to be there all the time but it was difficult to design interesting puzzles around it." Instead he opted for a compromise. Tentacle control alternates with continuous scroll sections in which the screen moves around the hero *Blood Money*-style.

The idea hit McCubbin, whose previous projects includes the ST conversion of *Shadow Of The Beast*, practically by magic. "It sounds corny, but I bought a new pen and this was the first thing that came into my head. I just wrote it down - I don't know why I came up with it."

Days later he suggested it to Millenium. "The game spec was just a two-page scrap of paper with a few little drawings at the side, but they bought it. We don't normally sign games on the basis of scraps, but Millenium wanted to sign a project with us and Tentacle just looked right."

With the exception of a couple of major graphical overhauls, the results so far have followed the original concept to the letter: eight worlds stuffed with giant monsters, a bigger than average hero sprite and 12 mega-meanies plus an arsenal of weapons to each level.

All of those graphics (including an extra-long intro sequence) may add up to one hell of a three-disk program. What makes it possible is the all-singing, all-dancing Eldritch in-house development system. Dubbed *Occai* (pronounced Och Aye) for no better reason than the fact that Mark McCubbin is a Scot, this was begun as an engine exclusively for Tentacle, then expanded to cover the development of all current Eldritch products. Asked to describe it, McCubbin waxes lyrical: "It's just very, very good." In other words, it's a language which allows several programmers to code a game simultaneously on several machines. "Someone can program part of it on a PC and part of it on the ST and it'll work on both machines." The same applies to Amiga and Sega MegaDrive data, the net result being that development time is cut down substantially.

THE TENTACLE SHIP'S ULTIMATE WEAPON is a giant spinning star and bullet extravaganza which hasn't been completed yet. "We're trying to make all the weapons really big so they look impressive." enthuses Mark McCubbin. There'll be 12 different types, everything from plasma bombs to lasers and a boost button to determine the strength. Finding out exactly how well each weapon works against a specific alien will all be part of the puzzle. An unusual feature is the ability to switch between any of your four available craft at any time. Each can be equipped with its own collectable hardware: any weapon you've already got is automatically assigned to one of your reserves.

Steve Wetherill chips in: "It's really an animation and movement control language with lots of bells and whistles tagged on." Initial development is carried out on PCs using *SNASM*. "To make Tentacle work on another format, all the Occai code stays the same - it's only the graphics handlers that need changing. The game logic is already working fully."

Occai, which also sports some pretty smart data-crunching capabilities, is constantly being updated and already into version 2.23. "And that's a lot of versions." In theory they should all be backwardly compatible so that old code never becomes obsolete. In practice it doesn't always work out quite that way. McCubbin: "We're not exactly popular when we use something in a new version that they have to change all the code for, but so far it's only happened twice."

By now, the programming spadework has been more or less completed. All that's left is to finalise the graphics, fine tune the hero craft's handling and implement the level designs. Meanwhile other Eldritch projects are vying for attention. Expect to see The Cat's footprint on (among others) a superhero exploit for Electronic Arts, System 3's revamped *Myth* and Elite's coin-op conversion of *Cavemen Ninja* over forthcoming months.

SOUND

When you've got 150 different complex sprites to process there isn't much room left for elaborate sound. However, a series of atmospheric Tentacle effects designed to enhance crucial parts of the action are currently being programmed by Steve Wetherill and Tim Wright.

SOME PRINTERS CAN BE CHILD'S PLAY...

Whatever computer you use, a toy town printer is going to make your printing look appalling however outstanding the content. To create the right impression and look professional you need a professional's printer.

NEC. It's a name that most professionals rely on. Now they introduce two new printers, the Pinwriter P20 and P30, specifically designed for personal use.

The 24-pin printhead technology that NEC pioneered produces type quality of crisp, sharp daisy-wheel standard, but at 108 characters per second in high speed letter quality mode and 216 characters per second in draft mode.

And the paper handling is superb. Built in push/pull tractors for perfect non-slip printing on continuous stationery; 'low tear off' for paper conservation and perfect realignment; paper park facility eliminating messy unloading when printing single A4 cut sheets.

They've even thought about the variable start of print positioning that personal use demands, allowing fine setting for each paper format.

And there's a choice of 9 resident fonts from prestigious Prestige Elite to classic Courier, including typeset look proportional spacing.

Both the P20 and the P30 are compatible with virtually any software and both will operate in all major hardware environments from IBM PS/1 and Amstrad 2086 machines through all the 100% PC compatibles to manufacturers such as Atari and Commodore.

At only £299 recommended retail price for the P20 and £399 for the wide carriage P30, with so many professional office printer features, you might be forgiven for thinking that they would cost at least twice that. But then creating the right impression is what it is all about.

For samples of the Pinwriter P20 and P30 print quality and more information on the printers either call us on **(081) 993 9831** or fill in and send the coupon, postage is paid.

...UNFORTUNATELY.

RE-DEFINED REALITY

The P20, professional quality for home use at only £299 RRP

The P30, the entrepreneur's printer at only £399 RRP

IBM, Amstrad, Atari and Commodore are all acknowledged trademarks.

Please send me samples of the print quality and further details on the

☐ Pinwriter P20 ☐ Pinwriter P30 ☐ Both

NAME

COMPANY (IF APPLICABLE)

ADDRESS

POSTCODE TEL

NEC Computer PERIPHERALS

Return to NEC Computer Peripherals, NEC (UK) Ltd., FREEPOST, NEC House, 1 Victoria Road, London W3 6BR.

TO/05

PROJECT
Rybok

PUBLISHER
Electronic Zoo/Eldritch The Cat

AUTHOR
Eldritch The Cat
Mark McCubbin (Design and Coding)
Jimmy Savage (Graphics)
Andy Jones (Graphics)
Mike Williams (Graphics)
Dave Price (Graphics)
Martin Calvert (Graphics)
Steve Wetherill (Sound)
Tim Wright (Sound)

INITIATED
February 1991

RELEASE
September 1991

PRONC

Eldritch The Cat and Electronic Zoo approach their first joint publishing venture with their feet firmly on the ground. Kati Hamza goes in for some serious sole-searching.

EARLIER THIS YEAR, the phone rang at the Liverpudlian offices of Eldritch The Cat. Mark McCubbin, director and programmer, picked up the phone: "It was Electronic Zoo, and they said, 'We want to do a joint publishing venture. Come up with a game,' so that is exactly what we did."

The result is *Rybok* (pronounced Ree-bok, like the trainers), an all-out horizontally scrolling beat 'em up with a metallic touch. The hero, one giant-sized, gun-toting, merciless dude, is entrusted with the task of cleaning a number (as yet undefined) of levels bursting at the seams with bugs, beasts and bloodthirsty creatures.

But this is a man with a secret: as he wanders through the regions of his troubled world, pod pick-ups transform his fleshy arms and legs into the articulated appendages of an intelligent robot.

Unlike *Tentacle*, the other Eldritch release covered this month, Rybok is aimed at a traditional audience. McCubbin expands: "We'll be creating a good playable game, but we're not going for originality." Instead the objectives are giant graphics, speed and coin-op quality. "We're aiming at people who want loads of pictures and giant creatures to blow apart – arcade fanatics basically."

The magic word is BIG, as McCubbin demonstrates. "The thing about it is that it's got big, colourful, detailed graphics, and I mean really big graphics, not just big, big like *Shadow Of The Beast* big, but big, big, big, Eldritch The Cat big."

Big translates into a main sprite that's four times larger than the chunkier-than-average star of Shadow Of The Beast. "It works out at 96 x 80 pixels. I don't think you can get much bigger than that," McCubbin insists. There'll also be a super-long intro sequence ("It's vital to have that because it really sets the scene") and more than 10 giant aliens per level.

"Hopefully if it's good enough it should go on to the arcades rather than the other way around," adds graphic artist Martin Calvert. "That's why we want it to feel like a coin-op rather than something programmed for 16-Bit."

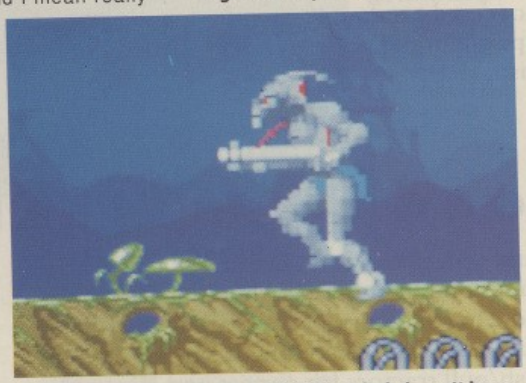
The cats are realistic about exactly what kind of a game they're aiming for. Rybok is the kind of money-making product designed to finance other more original projects, so it's got to sell well. And if it's going to do that, then it won't necessarily be breaking new ground. Steve Weatherill explains "Most of the games that sell aren't very original. You do get the odd *Populous* and stuff like that, but if you try and aim to write Populous you'll be working on it for years and years and go bust in the process. So we have to do something which makes money."

That doesn't mean that Rybok will be indistinguishable from every other beat 'em up though: "The last thing we want to do is annoy the player. We're really aiming to produce an arcade-quality game, but it's got to have some sort of twist to make it different from the rest, otherwise it'd be boring writing it."

So what are the magic ingredients that'll turn the average piece of code into a smash-hit arcade game? Martin Calvert sets the ball rolling: "An exciting variety of graphics, not to mention the way you fight and defeat the enemies."

McCubbin chips in: "The important thing is to keep introducing new features, new things appearing where you least expect them." One of his personal favourites is

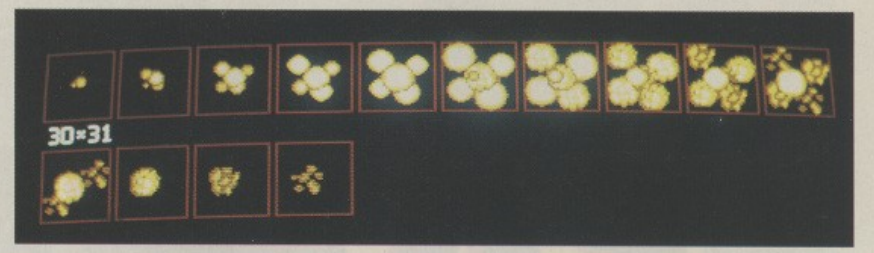
THESE GUYS ARE SMALL-FRY in comparison with the kind of meanies you can expect to see in the finished game. "What we're aiming for are giant aliens that actually look bigger than the screen vertically." Defeating them won't just be a question of punching until your knuckles are raw. You may end up having to jump on a bad guy's knees or bash key body parts to get the required result.



UNLIKE MOST ARCADE ADVENTURES, *Rybok* doesn't have its sprites wandering around the landscape in graduated steps; instead they smoothly follow the contours of the maps. This, an extremely early demo, consists largely of landscapes pinched from *Tentacle* (see page 57) and a very early sprite design. The finished hero, Eldritch assures us, won't bear such a striking similarity to 'The Beast'.

THERE'S NO PARALLAX SCROLLING AS YET, but there will be, mainly because in a game that's aiming for mega-graphics you just can't leave it out.

OUNCED REE-BOK



ALONG WITH EVERYTHING ELSE, Rybok's weapons are destined to be big. In addition to a few standard pieces of hardware you'll also be able to collect several more exotic ones. On the list so far are a South American bolas (a weapon consisting of two balls connected by a string, which wraps itself around the enemy's legs), a boomerang and a gigantic axe.

SOUND

Coin-op quality means coin-op sound. Musician Tim Wright, aided and abetted by the original Eldritch minstrel, director Steve Wetherill, is aiming for "atmospheric, great thumping stereo sound effects." The movement of monsters will be mirrored by the speakers: if the beastie's to your left, for example, all that stereophonic sound should be blasting your left ear. At present negotiations are under way to acquire the licence to use Queen's *Under Pressure*. "So far they've asked for £150,000 though, so that's a bit unlikely."

ONCE YOU'VE NABBED ALL THE RELEVANT PARTS, your hero, equipped with giant helmet, robotic legs and metal arms, looks something like this. Straightforward control of this technical monstrosity is a priority for The Cat; needing to learn an instruction book full of complex movements just doesn't appeal. McCubbin explains: "The more moves you have, the more confusing it gets. I just don't like the sort of game where you've got to point the joystick up to the left and waggle a bit. You usually end up performing some move you really don't want to do, like leaping around when you want to deliver a punch."

STOP PRESS!

Just as we were about to put this page to bed Eldritch told us that they had finally come up with a new name for Rybok, which is: **Under Pressure.**

Ghouls 'n' Ghosts, particularly the magic chests which spontaneously pop out of the ground: "That game's excellent, really well done. What attracts me is that however far you get, there's always something there that you're desperate to see more of. Curiosity is what drives you on to play the game and that's what we want to achieve with Rybok."

The similarity between the game's working title and a well-known brand of trainers is part of a shrewd, but as yet embryonic, marketing plan. So far, all Eldritch attempts to coax Reebok into sponsership have met with stony silence. "I don't think they believed us with a name like Eldritch The Cat. We also approached Cadbury's because we thought of basing a game round the exploits of the man in black. You know, 'because the lady loves Milk Tray'. I don't think they believed us either."

Whatever the outcome of these heroic marketing attempts, and whatever the game is finally called (Rybok is very much a working title) McCubbin is determined to pay homage to the original idea and somehow fit his favourite footwear in: "They may not be Reeboks, but somewhere there will definitely be trainers."

LIKE THIS, THE NEW ELDRITCH THE CAT LOGO, all of the artwork and packaging for *Rybok* will be designed by the team's idol, artist Tim White. At present, McCubbin and company are trying to persuade him to use a computer to aid his designs and have knocked up a computerised version of the logo just so thay could demonstrate how easy it would be to change the colours on the design. White was impressed, but not convinced.

GRAPHICS

"Rybok is going to be a graphics showcase," declares Steve Wetherill. And with five graphic artists (martin Calvert, Jimmy Savage, Mike Williams, Andy Jones and Dave Price) chipping in, they should definitely have enough material. For its first co-publishing venture Eldritch has total control over all the graphics, so there'll be giant wolves and killer dogs, plus stylistic tributes to the company's favourite artists, Rodney Matthews, Roger Dean and Tim White. "In a beat 'em up it's good to beat the hell out of things that jump at you," McCubbin claims. The finished baddies will leap out dramatically and backspin when you hit them, though exactly how hasn't been established yet. "The main thing," explains Calvert, "is to get away from the punks with the Mohicans. How many times have you beaten up one of those?"

GET INTO LEATHER!

Win an Authentic Flying Jacket in This Great MicroProse Competition

HAVE YOU ALWAYS FANCIED YOURSELF as a pilot, but couldn't afford the lessons? Or maybe you're afraid of heights... or could it be that your eyesight let you down?

Whatever your reason for not being up there in the clouds with the Toppest of Top Guns, MicroProse is happy to offer you the chance to strike the right poses by offering an authentic leather flying jacket to the winner of this easy-to-enter competition.

And why is the Tetbury-based simulation specialist willing to stump up such an awesome aviational giveaway? Because of the imminent release of *F-15 Strike Eagle II* - that's why!

F-15 II's simulation of high-speed combat is so realistic that you'll almost feel the 'G's, so what better way to put the finishing touches to the atmosphere than be getting kitted out in a genuine leather flying jacket before booting up for another blast.

And what do you have to do to get your sleeves into this hide? Simple. Just use your skill and judgement to filter out the correct answers to the teasers opposite. When you think you've got them right, just pop the answers on the back of a postcard (or on a sealed envelope) and send it to: **Lovely Leather, The One, EMAP Images, Priory Court, 30-32 Farringdon Lane, London EC1R 3AU.**

The competition closes by last post on May 9th 1991, so get those entries in. Oh, and by the way, don't forget to state your size (so that we know which jacket to get for you, of course!).

THE SMALL PRINT

The editor's decision is final and no correspondence will be entered into, winners will be published in a future issue of *The One*. Employees of EMAP and MicroProse (and their friends or relations) may not enter. No cash alternative will be offered in place of the prize.

BE ONE OF THE LADS in your very own leather flying jacket (not necessarily exactly like one of these though).

1. Which of these is a famous MicroProse flight simulator?
a) Rainbow Islands
b) S-FA Interdictor
c) Gunship

2. Who is MicroProse's all-action, high-flying 'friend of the Pentagon' boss?
a) Tom 'Silly' Cruise
b) 'Wild' Bill Stealey
c) Crazy 'Dave' Gruisin

3. Which legendary Hollywood character is famous for his leather jacket?
a) Indiana Jones
b) John Rambo
c) Pee Wee Herman

FLAMES OF FREEDOM

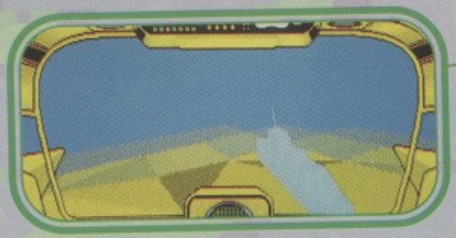
TOTAL FREEDOM

FLAMES OF

Flames of Freedom, the new blockbuster from the creators of Midwinter, offers you total freedom. Freedom of choice, Freedom of action, Freedom of movement.

Dogfight with opponents over villages for command of the skies, or attack ground targets which serve the enemy's cause.

Night time sequences afford excellent cover for secret movement and actions, illuminated by the glare of your jeep's headlights.



The playing area of three million cubic miles is not restricted solely to areas above ground. You have full freedom of movement underwater, and three types of 'submarine' in which to achieve it.

Seek out and destroy enemy shipping units, condemning them to a watery grave on the sea bed, from where the ocean's surface is clearly visible above.

Screen shots shown are taken from the Atari ST versions. Actual sceens may vary by format

TOTAL FREEDOM- FROM RAI

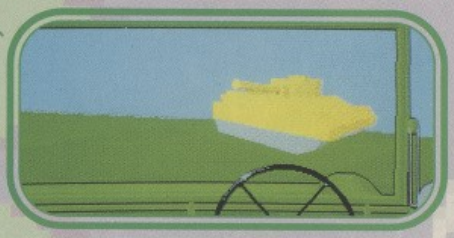
(1,000 miles long X 1,000 miles wide X 15,000 feet high.) + (4,000 characters X 22 modesf t

OF FREEDOM

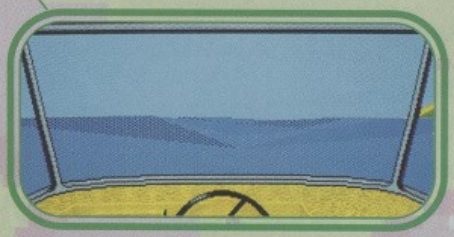
A three dimensional environment packed with action, adventure and strategy. Entering it is easy.....breaking free is what's hard !

A million square miles of accurately mapped 3-D terrain, generated by fractal techniques, and fully light sourced throughout, provides a playing arena far superior to even its predecessor, Midwinter I.

Fly the skies above the forty-one islands by helicopter, zeppelin, parachute, rocket pack, or, as seen here, biplane and balloon, all offering superb views of the land and of the other aircraft.



The enemy have a vast array for firepower aimed at you, on land, in the air, and across the sea, and react quickly and intelligently to your actions.



The sea surface is generated by constantly moving fractal points, causing you to bob up and down as you swim or sail across it.

Flames of Freedom will be available shortly for your Commodore Amiga, Atari ST and IBM PC compatibles.

AINBIRD MASTERS OF STRATEGY

des of transprt X 1,000s of buildings) = 3,000,000 cubic miles of Action, Adventure and Strategy.

From the best selling role-playing game Gremlin brings you...

COMPUTER ADVENTURE IN A WORLD OF MAGIC

Screen shots from Amiga version

Gremlin Graphics Software Ltd.,
Carver house, 2-4 Carver Street,
Sheffield S1 4FS
Tel: (0742) 753423

GREMLIN®

HeroQuest © 1990 Milton Bradley Ltd.

Available On:
Amiga • Atari ST/STE • Spectrum, Amstrad and C64 cassette & disk
(PC VERSION AVAILABLE SUMMER 91)

REVIEW

MAY 1991

This is an exciting moment for lovers of Amiga games, because for first time ever *The One* is bringing you 21 pages of stunning reviews exclusively for your machine. But we've not abandoned the traditional style that you're familiar with. Following our reviewers' comments, the games are left to speak for themselves. Relevant screenshots illustrate the game's features, while the ratings, price, and release date are encapsulated in an easy-to-digest form. What more could you possibly ask for?

68 F-15 STRIKE EAGLE II
MicroProse

74 SKULL AND CROSSBONES
Domark

77 'NAM
Domark

80 PGA TOUR GOLF
Electronic Arts

82 DAS BOOT
Mindscape

86 CHUCK ROCK
Core Design

89 JAHANGIR KHAN'S WORLD CHAMPIONSHIP SQUASH
Krisalis

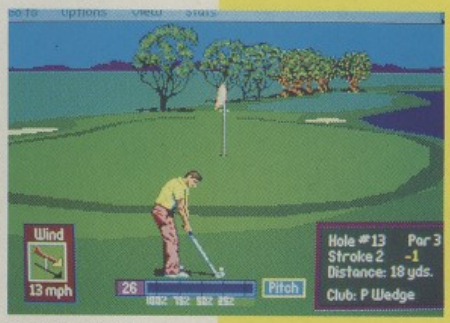
92 CADAVER – THE PAY OFF
Renegade

95 VIZ
Virgin Games

101 DEMONIAK
Palace

102 CRYSTALS OF ARBOREA
Palace

F-15 Strike Eagle II.



PGA Tour Golf.

Cadaver – The Pay Off.

Demoniak.

PRICE	£24.99
OUT	Now
GRAPHICS	78%
SOUND	74%
PLAYABILITY	75%
VALUE	60%

OVERALL 70%

GRAPHICS
Not necessarily a measure of how colourful or well drawn they are, but how well they are used

SOUNDS
Once again, this isn't a reflection of quantity, or indeed quality, but of how well it fits in.

PLAYABILITY
The big one – how does the game feel - addictive or just uninteresting?

VALUE
Essentially a reflection of lasting interest – how much game you get for your cash.

OVERALL
A useful point of reference – a summary of the preceding ratings.

WHAT'S TICKLING THE TEAM?

The One team have been having a whale of a time this month, what with splitting the magazine into two and getting used to all the amazing new Desk Top Publishing technology that's now used to put the magazine together. But despite rushing around like blue-arsed flies we've all still managed to get some time in on our favourite games. Here's what tickled our fingers this month.

CIARÁN BRENNAN
Ciarán's been off practising his skiing in Andorra this month (how come, when everyone else has been working so hard?). He found the Sega Game Gear excellent in-flight entertainment on the way over, with both *Super Monaco G.P.* and *Columns* getting a good look in.

GARETH JONES
Gareth has been indulging his passion for frequent games of *Kick Off 2* - and losing as usual. Consolation has come in the form of a brand new Macintosh computer for him to play with. He's already discovered that *Crystal Quest* on that machine is a perfect way to improve his mouse technique!

LAURENCE SCOTFORD
Laurence has remembered why it was he liked *Cadaver* so much, and is currentlly burning the midnight oil trying to get his head round *Cadaver – The Pay Off*, as well as rediscovering the delights of *Lemmings*. He's also having fun with a new Macintosh and a PD version of *Backgammon*.

PAUL PRESLEY
Sporting Paul has been sweating it out with *Jahangir Khan's World Championship Squash*. He's also had cause to celebrate because he's finally managed to complete *The Secret Of Monkey Island*.

JULIAN WATSHAM
New kid on the block Jools is already a firm fan of that corny caveman *Chuck Rock*, and going back even further in time to re-sample the wonders of *Xenon II*. Back in the present he's been keeping himself happy on the long train journeys into work with *Gargoyle's Quest* on the Gameboy, and then proving his prowess with *The Killing Game Show* once he's got here.

F-15 Strike Eagle II

MicroProse

PRICE
£29.99

OUT
JUNE

GRAPHICS
93%

SOUND
89%

PLAYABILITY
94%

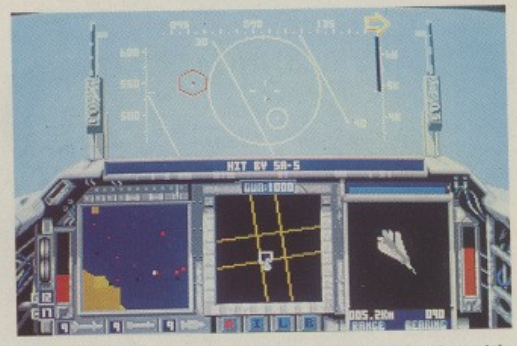
VALUE
93%

OVERALL
90%

The facts: the design brief of the F-15 series has changed during its lifetime. It began in the mid 1960s as an ultra-fast air superiority fighter, but the latest model - the F-15E Strike Eagle, featured in this game - has been vastly enhanced by the addition of ground attack capabilities. In addition to a 20mm cannon, it's equipped with a sophisticated zoom laser-target-tracking system and a huge array of air-to-air and air-to-ground weaponry.

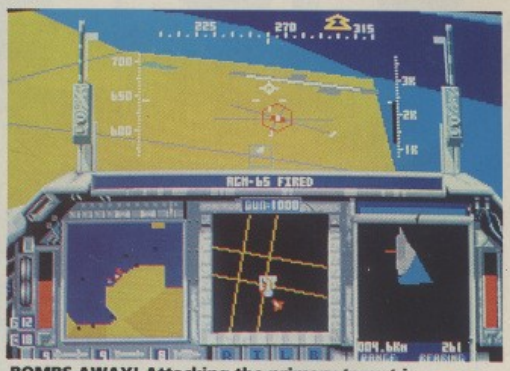
MicroProse has attempted to translate this military masterpiece grommet for grommet. The simulation features six mission scenarios: the PC's original quartet of Libya, the Persian Gulf, Vietnam and the Middle East; plus two extra terrains, the North Cape and Central Europe. Medals and promotion are the rewards for particularly successful flying feats, and coffins are provided in case of failure.

The package incorporates a typically encyclopaedic manual, maps of all six scenarios and a single-sheet control guide - although not a keyboard overlay.

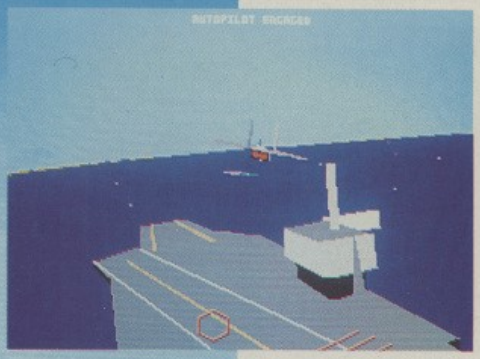


WHEN FLYING IN ROOKIE MODE, the mission begins with your F-15 already airborne - and providing you're not too badly damaged, the plane lands automatically. It's a good idea to come out shooting, because there are usually a few enemy planes right in front of you.

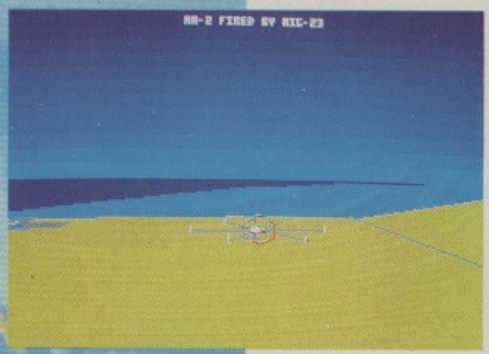
THIS IS THE REVERSE TACTICAL VIEW, looking from the target towards the F-15. It simply shows you how things look from whatever is currently targetted by your target tracking box, and lets you experience the thrill (!) of being blown up. The opposite of this is the Tactical View, which shows the action looking from your fighter towards the target: this is particularly useful in dogfights.



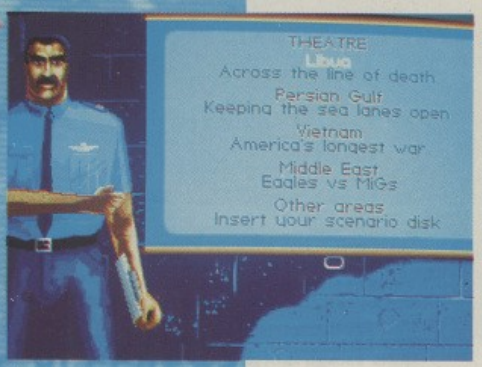
BOMBS AWAY! Attacking the primary target is objective numero uno, although you can take out other enemy installations along the way for extra machismo rating. However, you can't even think about going home until you've achieved the primary objective, so it's wise to make sure you've got target lock (oval on the HUD) and then wait for the oval to change colour, indicating a `high-accuracy firing solution'.



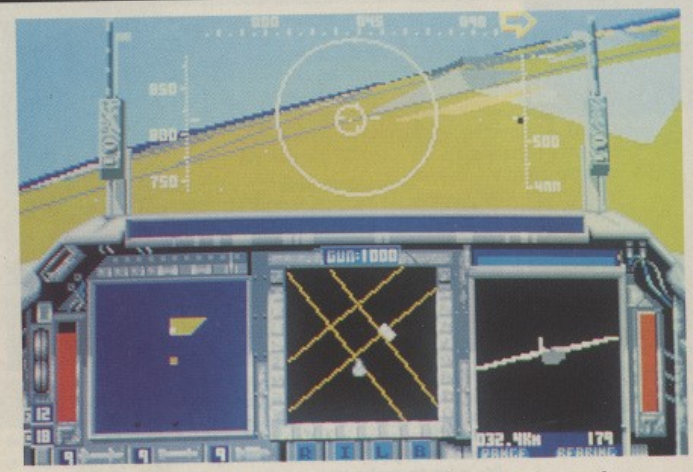
THIS IS JUST ONE of the external views possible, as the aircraft performs hair-raising manoeuvres above the carrier. One pleasing display to sample in Rookie mode is sitting at the airbase or aircraft carrier and watching your own aircraft come in for a perfect touchdown. Don't fiddle around with the visual effects too much, though - the enemy is nothing if not persistent, and he has absolutely no qualms about following you all the way home.



ACTIVATE DIRECTOR MODE to view all of the neatest views at the most appropriate times. For example, when a fighter scrambles to intercept you the director automatically cuts to the airfield to show the fighter taking off; and when a SAM station shoots at you the view switches suddenly to the radar base to show the missile arcing into the sky. It's pretty impressive stuff and a novel feature, but an insufferable nuisance when you're busy dogfighting.

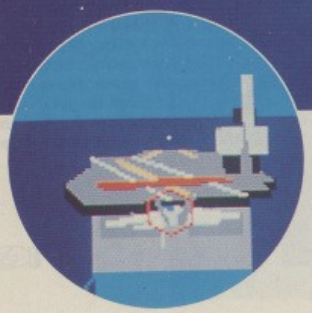


THERE'S PRECIOUS LITTLE MESSING with pre-flight setup screens. Select your difficulty level, choose your theatre and away you go. That's it, there's no time wasted in kitting the plane out as your armaments are always the same: Mavericks for the ground targets, short-range Sidewinders and medium-range Amraams for air-to-air combat.



EACH MISSION FEATURES two ground targets - primary and secondary - and, of course, the area is bristling with MiGs and ground-based opponents who want to claim you as a prize.

THE TOUGHER THE MISSION and the more targets you destroy, the more points you score. The more points you score, the more medals you get and the quicker you get promoted. If you crash you die, and if your fighter is hit too many times crashing becomes inevitable. You can even be killed in the ejection process, if the plane is inverted or if you're too close to the ground when you punch the button. Worst of all though, if you bail out too many times (and waste a lot of expensive hardware in the process) you'll find that there are worse things than dying, as your character is assigned to a desk job - the shame!



SEEN FROM THE SIDE, or indeed from any other angle, the F-15 is a big brute. Supersonic, super manoeuvrable and packing a super-hard punch, it doesn't half shift when you hit the afterburners - and quick escape is often the better part of valour in sticky situations.

COMMENT

If you think that there are already enough mission-based combat flight simulations from MicroProse, think again. The most obvious parallel you can draw is with *F-19 Stealth Fighter* - released last year - but the differences are quite marked: where F-19 was a combination of strategy and fighting, F-15 is almost entirely biased towards combat. It would be wrong however, to assume that as a result it's virtually an arcade game: as soon as you get into any form of conflict, you realise just how accurate (and tough) a simulation it can be. The multiple difficulty levels mean that it is as friendly towards beginners as it is hostile to experts. Not only this, but there are six terrains to choose from, each packed with a host of targets requiring a range of skills to eliminate. The presentation and selection screens have been abridged to suit the more instantaneous nature of the action - all you basically have to do is select a name, a difficulty level and a mission scenario, and you're off! This may be a disappointment to serious enthusiasts, but it's ideal for anyone who wants to get directly into the action. The graphics system is an enhanced version of that used in F-19, and the result is some of the smoothest 3D routines you're likely to find in any flight game. Couple this with a cluster of excellent samples and realistic sound effects, and you've got yet another highly polished and very playable simulation. Don't miss it.

Brian Nesbitt

© INFOGRAMES 1990 - RCS LYON B 328 033 410

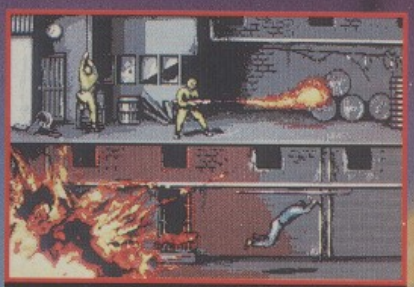
ALCATRAZ

The island of Alcatraz stands empty and discarded - a relic of the past. But, as night settles, the ruins of the old prison comes to life. In an ironic twist of fate, Alcatraz is now the hide out of an evil drugs cartel, led by Miguel Tardiez, its cruel and callous chief. As a crack commando you are about to undertake the most perilous and daring mission ever. Your task - penetrate the island of Alcatraz and capture Tardiez. If you fail the State Department will simply deny any knowledge of your existence. There's no such thing as a dead hero.

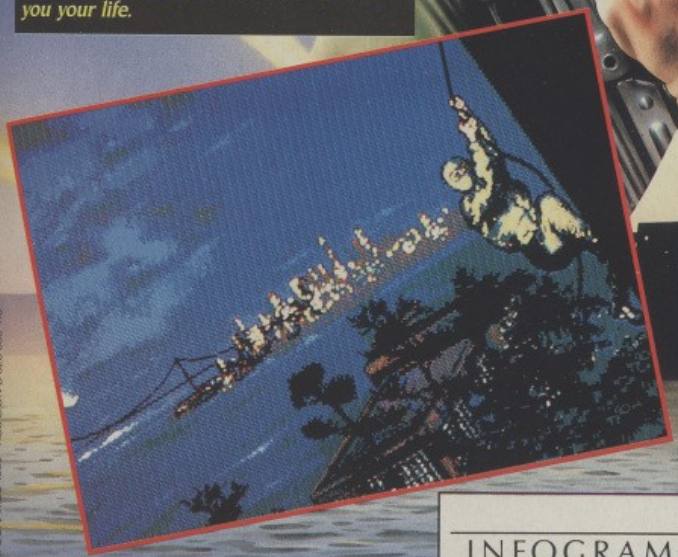
It's the final countdown, as HQ gives the last briefing.

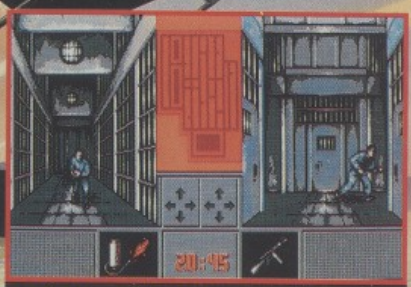
Track down Tardiez's men, as you move ever closer to the very centre of corruption.

Prepare with care, a simple mistake will cost you your life.



One false move and your cover is blown.





Tardiez's men lurk on every corner.

INFOGRAMES

FOR:
ATARI ST/STE - AMIGA - PC & COMPATIBLES

© INFOGRAMES 1990 - RCS LYON B 328 033 410

Four levels of difficulty will help you to learn quickly - and optional autopilot landings will allow you to concentrate on airborne action. The controls are simple, effective, and easy to remember. It is a great flight sim for beginners and experts alike.

Fly missions in any of six real world arenas from the Persian Gulf to Vietnam, Central Europe to the Middle East and the North Cape to North Africa, giving you a total flying area of nearly half a million square miles.
Each area contains hundreds of missions and each mission will differ depending on your chosen tactics, even if you fly it twice!

IBM PC & Amiga screen shots

An amazing ten viewpoints give you the opportunity to view the fast flowing 3-D environment from virtually anywhere around your plane - and a unique "Director" option can be used to automatically change the view for you, so that you're always looking right at the centre of the action.

The newest smart weaponry and laser-guided armaments are primed for launch - it's your job to make sure that you're in the right place at the right time, and avoiding the constant enemy attack being thrown at you.

Enemy pilots and missile crews act and react intelligently and quickly. Success depends on making the right moves - and making them fast. F15 Strike Eagle II puts you in the hottest seat of them all - Take a look for yourself.

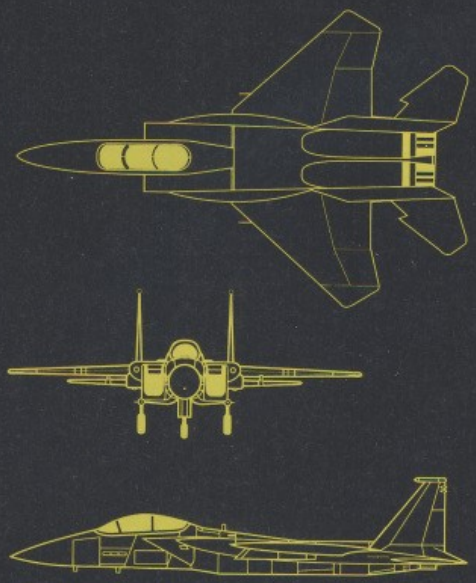
F15 Strike Eagle II follows F19 and Gunship into the front line. The latest and g

AIR SUPERIORITY

The F15 Strike Eagle is the latest in a long line of F15 Eagles, whose development began in the mid '60s. Originally conceived as an ultra-powerful, ultra-fast air-superiority fighter, the design has developed into an air-superiority fighter with ground-attack capabilities.

The F15 Strike Eagle is one of the fastest, most manoeuvrable, and most powerful military aircraft in the world. It has the capacity to carry the latest air-to-air and air-to-ground armament in addition to its 20mm cannon.

The latest version of the Strike Eagle is equipped with a sophisticated zoom FLIR/TV/Laser target tracking system that allows the pilot to see close up views (either TV or thermal) of the target at all times.



MICROPROSE™
SIMULATION • SOFTWARE

d gr test from MicroProse will soon be available for Commodore Amiga and Atari ST.

SKULL AND

SKULL AND CROSSBONES
Domark

PRICE
£24.99

OUT
NOW

GRAPHICS
78%

SOUND
79%

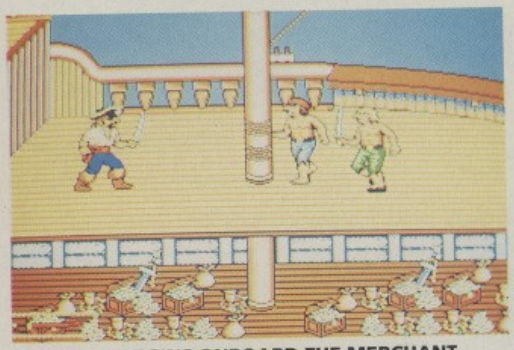
PLAYABILITY
76%

VALUE
79%

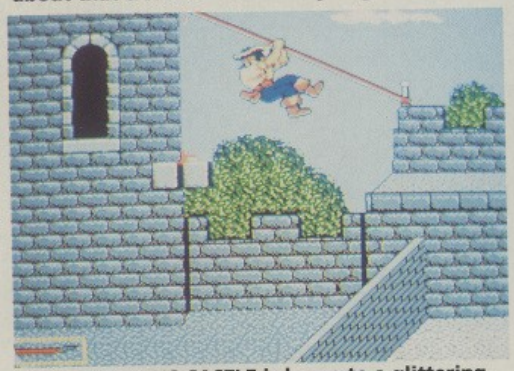
OVERALL
77%

Ahoy me hearties! One-Eye's the name and slashin's the game. Come aboard the Jolly Roger and see for yourself (ar-harr, shiver me timbers, etc)!

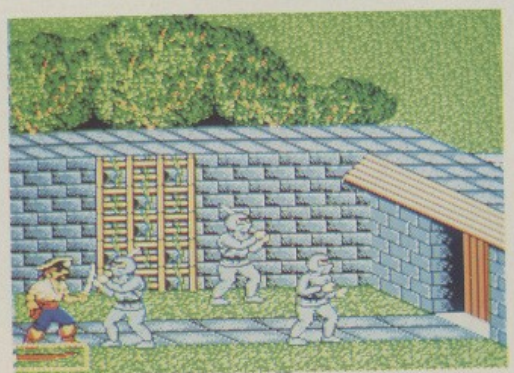
As you've probably guessed, *Skull And Crossbones* is all about pirates, in particular a gruesome twosome known as One Eye and Red Dog. These sinister salts are on a voyage of discovery, battling their way through eight levels of sword-fighting, spitting into buckets and walking the plank.



OUR TALE BEGINS ONBOARD THE MERCHANT SHIP, The Jolly Roger, admist cries of 'pieces of eight' and 'yo ho ho'. Silence the wretches by slashing your way across deck... before being whisked away by an evil sorcerer. Oh, forget about that treasure - the scurvy dog takes it all.



THE SORCERER'S CASTLE is home to a glittering crown, guarded by a horde of evil pirates. To help him out, One Eye has to use all of his acrobatic skills (rope climbing for instance). Good thing he remembered to rub his hands in anti-friction cream before starting.

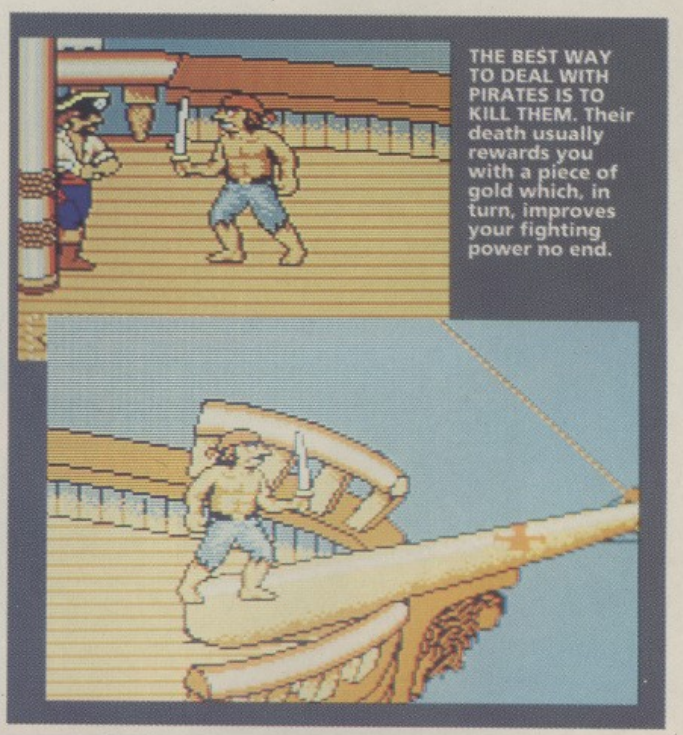


THE NINJAS ATTACK WITH THE SPEED OF... well, ninjas. If you don't chop them, you'll end up as chop suey. As if you hadn't guessed, this level is full of those quick-footed martial artists, whose strength lies in great agility. A bit of brawn and mental dexterity should see you through.

CROSSBONES

On their way, they encounter all manner of demons and dastards, including pirate ships, castles, enchanted caves and mythical islands, with pirates and ninjas(?) to kill, wenches to save, and treasure to collect along the way. Treasure is particularly important: extra dosh means an increase in your fighting prowess, which means your foes will be swabbing the deck all the sooner.

THE MANY INTERMISSION SCREENS fill you in on the background details. This scene features One Eye and Red Dog behaving in an ungentlemanly manner and attempting to raid an innocent merchant ship. This is no game for wimps.



THE BEST WAY TO DEAL WITH PIRATES IS TO KILL THEM. Their death usually rewards you with a piece of gold which, in turn, improves your fighting power no end.

WHEN YOU SEE A MYSTICAL CROSS, it's a good idea to walk over it and press fire...

COMMENT

THIS IS A SLIGHT DEVIATION from the usual beat 'em up fare, and it gives the genre a couple of unusual twists. The graphics are unfussy, but convey the action well enough and, together with a brace of catchy tunes, they help create the perfect pirate atmosphere - it's not long before you're muttering 'scurvy land-lubbers' and 'yellow-backed dogs' under your breath. The two-player option is a bonus: it not only makes life a bit easier (particularly if you're playing with an expert), but it's also a lot more fun, since you've got the added element of fighting over who gets the extra energy and money. It's not the greatest or most polished beat 'em up in existence, but it's a good enough game to keep you entertained for a while, particularly when the blood begins to fly...

Julian Watsham

Psygnosis *and their Molecule Madness*

Against the clock, you use your chemical tendencies to build molecules out of atoms provided.

And don't be surprised if the very atom you *don't* need will be the one you're given to use next . . . Pray for a Joker Atom!

If you don't look like a mad scientist now, you will by the time you've tackled **ATOMINO!**

Up and Atom!

Screen Shots from the Amiga Version

PSYGNOSIS, FREEPOST, LIVERPOOL L3 3AB, UNITED KINGDOM

PSYGNOSIS

1965-1975 'Nam

THE COMMUNISTS HAVE LAUNCHED a two-pronged assault on South Vietnam: using North Vietnamese regulars and Viet Cong guerillas to infiltrate enemy territory, while their agents plant the seeds of popular rebellion in the minds of the South Vietnamese.

That, in a nutshell, is the problem facing you at the beginning of this simulation of military and political strategy in South East Asia in the decade beginning 1965.

The program incorporates two distinct styles of play, allowing the player to either step straight into the shoes of Presidents Johnson or Nixon, or to jump head-first into the thick of three battle scenarios. Use your imagination to rustle up a little 'reds under the bed' paranoia and you could almost be there.

The game's also split into two other categories: long and short. Choose a long game and you find yourself in the Oval Office in either 1964 (Johnson) or 1968 (Nixon). As guardian of the free world, it is your burden to plan a successful military campaign and quash the communist millions infiltrating South Vietnam (and by extension the world). Not only this, you also have to conduct the war in a way that keeps the decent folks of America content: this basically means that you have to carefully control the level of commitment to South Vietnam, both military and economic.

The shorter version of the game allows you to relive (via icons and a map display) the three major campaigns of the war: the Tet Offensive, the defence of the Khe Sanh plateau and the 1975 Offensive. You can, of course, interfere and perform 'what if' operations if you want to.

This performs a dual function, allowing you to get used to the tactical military aspects of the action before tackling the long version, or working as a game in its own right for those who can't take either the politics or the extended game duration.

THIS IS WHERE the buck stops and decisions start. As President and Commander-in-Chief of the US armed forces, it's your job to oversee the course of the war. The opposing poles of public opinion and military support are represented by the newspaper on the left - not always a reliable source of information, but an excellent guide to your election chances - and the pile of reports on the right

ONE OF THE GAME'S BEST TOUCHES is its newspaper-style gauge of public opinion. What the man on the Cincinnati Omnibus thinks about you is crucial to your success or failure, and the broadsheets both reflect and shape his opinions. Examining the papers won't tell you much that you don't already know - they're mainly packed with leaked details of the units you've deployed - but it will give you a clue as to whether or not you're over-committing troops and will soon tell you if the war is unpopular at homeCtroops screen)

THE SEEDS OF BATTLE

WHEN THE FIRST AMERICAN TROOPS set foot in Vietnam it was the country's third armed occupation in 100 years.

Vietnam had first been conquered by the French in 1858 and then occupied by Japan during the Second World War.

The bitter fighting which subsequently broke out in late 1945 between the Japanese and French-supported regime of Bo Dai and the communist Vietminh (Independence) League led by Ho Chi Minh culminated in the 1954 Geneva Conference. A compromise solution was found to the country's difficulties.

A line was drawn along the 17th parallel latitude line and the nation divided in two: communist North Vietnam with its capital at Hanoi and pro-western South Vietnam with its capital at Saigon. This compromise gave birth to 20 years of conflict.

In the south, the communist Viet Cong, supported by China and North Vietnam, attempted to seize power. In line with America's strong anti-communist views, the early '60s saw President Kennedy beginning to send advisors and special forces to support the South Vietnamese.

Then in 1964, North Vietnamese torpedo boats allegedly attacked two American destroyers. Congress granted President Johnson emergency war powers, and he sent in the first regular troops.

The rest, as they say, is history.

NAM 1965-1975
Domark

PRICE £34.99

OUT NOW

GRAPHICS 81%

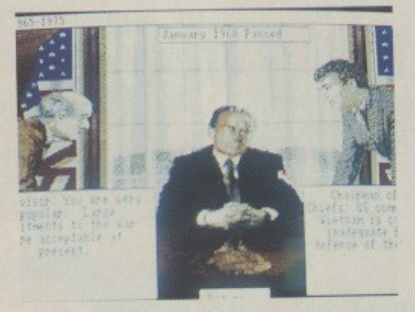
SOUND 72%

PLAYABILITY 84%

VALUE 77%

OVERALL

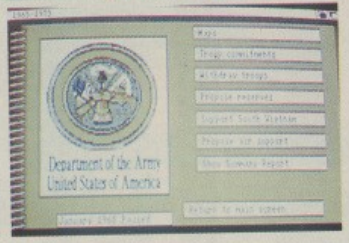
OFFICIAL GOVERNMENT REPORTS form the crux of your decision making. Files reveal detailed maps, allow you to commission financial or military aid for South Vietnam, commit or withdraw troops, commit reserve forces and air support to the war, or examine your current status. If you commit troops you're presented with this screen, detailing the individual units available. Sensible military strategists initially aim to contain the communist advance, which means a couple of units deployed in each of the four Corps areas on the map. For extra mobility and strength, some units can be air-mobilised, giving them helicopter capability.



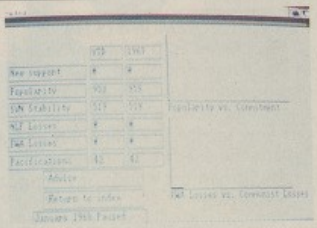
SHOULD YOU WANT A LITTLE HELP with decision making, the President's helpers are on hand to dish out advice. The PR representative and the Chairman of the Joint Chiefs of Staff are just a visual representation of what you read in the newspapers: if you can afford to throw more men into the theatre of operations and public opinion can stand it, you're laughing. If not, it's time to kiss goodbye to high office.

THE MAIN MAP SCREEN reveals much of South East Asia, including the whole of South Vietnam. It also shows the relative positions of the four Corps spread out along the Eastern coastline.

ACHIEVE VICTORY and you could change the course of American cinema. All the films from *Apocalypse Now* to *Platoon* will be stories of glory, veterans will come home hailed as heroes and President Nixon might just survive Watergate.



EACH OF THE CORPS AREAS can be accessed to reveal a detailed battlefield plan. It might look complex, but understanding this section soon becomes second nature. Information on each unit is gleaned by simply clicking on the icons.



A SUMMARY REPORT displays your current status. The top graph is the most difficult in which to achieve success: the level of commitment is usually inversely proportional to popularity. Step up troop deployment without planning for military gains and you'll be as popular as a killjoy at a comedy convention. The lower graph shows military success in terms of Americans killed against Vietnamese losses. A good pacification percentage means that more South Vietnamese favour the American cause.

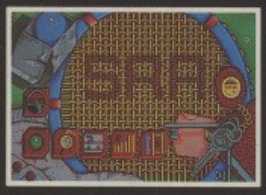
COMMENT

THE STRATEGY FAN who craves a smattering of arcade sequences to balance their tactical manoeuvres is going to be disappointed here. This is a shame, as once you're accustomed to the erudite style of the action, it's a lot of fun just messing about with the history. This is the major appeal: because it's been such a well-publicised war, you can't resist the temptation to shape its events in your own way, often at odds with what actually happened. This sense of remaking history could have been enhanced, had the presentation been better: there are too few still graphics screens and not enough variety in the battle animations to evoke the atmosphere of the period successfully. Nor is this helped by the disk handling: every command you execute results in disk accessing and occasional disk swapping, and the buffer on commands is long enough to prove irksome. Apart from these minor drawbacks, *'Nam* is beautifully executed: what there is of the presentation graphics is excellent, and the (sparse) sound effects are good enough to enhance your enjoyment without detracting from the action. A nice touch is the appearance of variety cleverly worked into the newspaper reports: the stories are written in a similar way, but the political platitudes and trite phrases are slightly changed. This is true of the game as a whole: it looks quite simple, but there are subtleties which don't become apparent until you're well into a campaign - your ability to balance fickle public opinion with commitment to the war is sorely tried. It's a challenge that anyone with an interest in strategy or the manipulation of history should take up.

Gordon Houghton

JAHANGIR KHAN World Championship SQUASH

JAHANGIR KHAN, the World's number one Squash Player, now brought to the small screen by Krisalis Software.

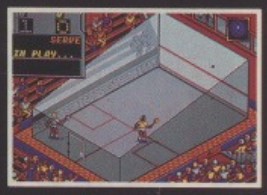


The game features two stand alone simulations, Club Level, which is officially endorsed by the Squash Rackets Association, this allows the player to compete in Squash Club Competitions, using menus which include an eight rung league ladder containing forty players, ball speed control using spot colour option,

Match length one, three or five games, play by new or old rules and player statistics.

World Championship, the game simulates all the excitement and tension of the 32 seed World Championship Knockout competition.

Play one on one two player option, or head to head against the computer.



AVAILABLE FOR:
IBM PC & COMPATIBLES,
AMIGA & ATARI ST
£25.54

SPECTRUM, CBM 64
AMSTRAD CPC,
£11.23 CASSETTE **£15.31** DISC

COMING SOON
ACORN ARCHIMEDES
£25.54

KRISALIS SOFTWARE LTD.

Endorsed by SRA Squash Rackets Association

© Krisalis Software Ltd, Teque House, Masons Yard, Downs Row, Moorgate Rotherham, S60 2HD

PGA T

PGA TOUR GOLF
Electronic Arts

PRICE
£29.99

OUT
NOW

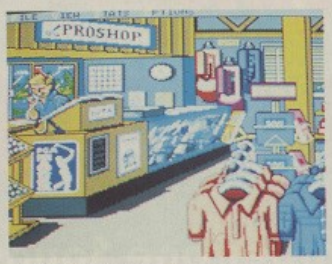
GRAPHICS
90%

SOUND
89%

PLAYABILITY
93%

VALUE
90%

OVERALL
92%



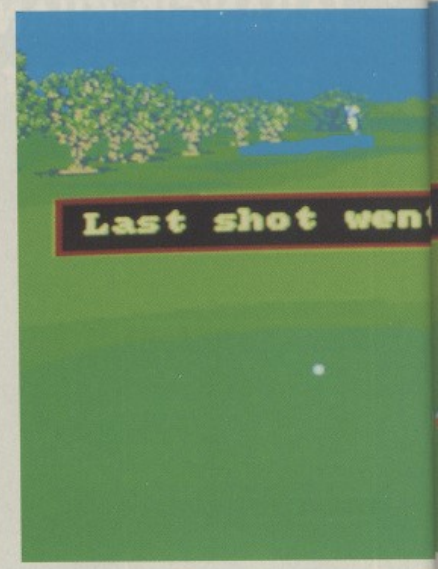
LIKE EVERY GOOD ROUND of golf, this one starts in the Pro Shop. You can't actually buy anything here, but it does act as the front-end menu from which you can choose to alter the options, start a practice round and so on.

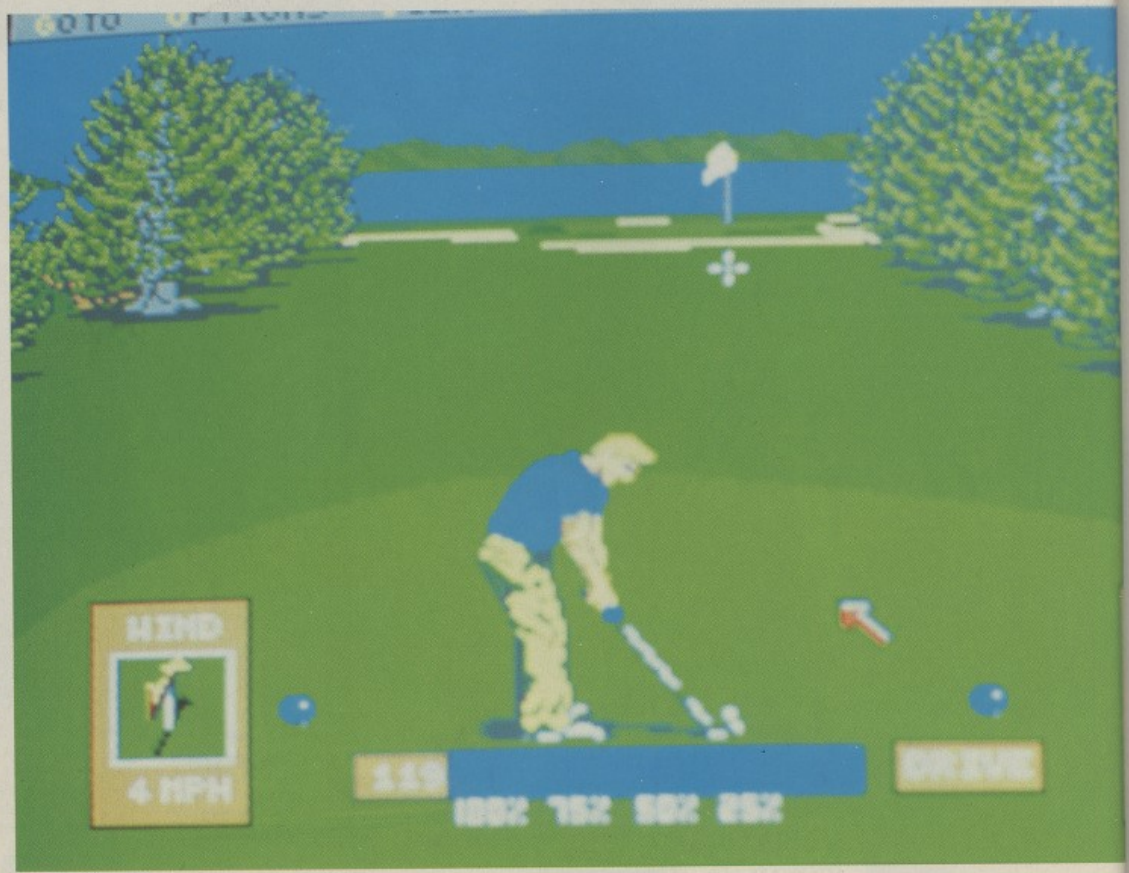
EACH HOLE IS INITIALLY VIEWED on an optional 'fly-by', essentially a camera view of the hole which zooms past the green and around the bends before arriving at the tee. This is accompanied by a brief word of advice from one of the PGA's top stars.

THIS ELECTRONIC ARTS' GOLFING SIMULATION first made an appearance on the IBM way back in July of last year. Since then, the sport has stormed onto our screens on Saturday mornings at one o'clock, just after the skiing and before the Indy 500 racing... do you get the feeling that EA is trying to corner the Saturday morning TV sports market?

Anyhow, back to the game. There are four courses here for the choosing, Sawgrass and Sterling Shores in Florida, PGA West in California and Avenel in Maryland, each with its own good and bad points (Sawgrass in particular is notorious for its 17th 'island' hole).

Both tournament and practice rounds can be played, with the statistics for each player recorded for all time on disk. So what are you waiting for? Pick up your clubs and get swinging.

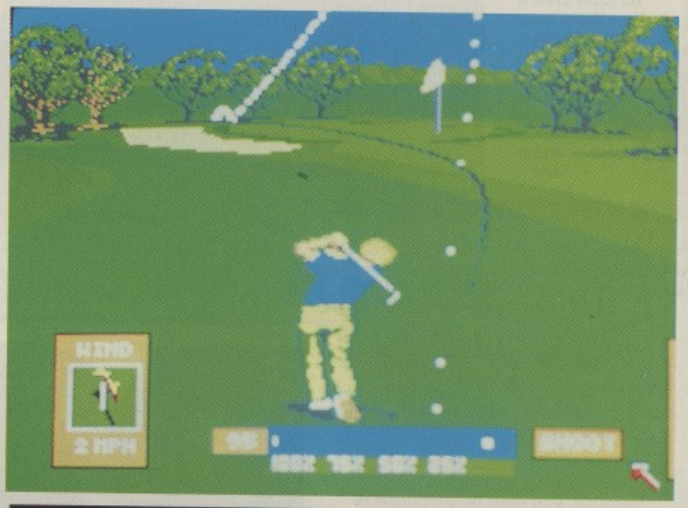




TEE ANYONE? Each shot is affected by a number of factors: the wind, the ball's lie and your own tendency to hook and slice have to be taken into consideration. The crosshair indicates the direction that you're aiming in, while the percentage bar at the bottom represents how much power you apply to each shot.

TOUR GOLF

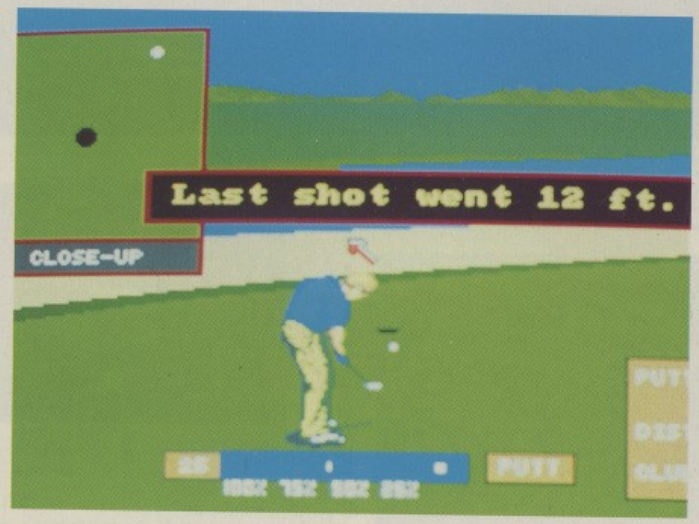
AS THE BALL SOARS OFF over the horizon, you'd think that finding it again would be a little tricky. Not so, thanks to the unique 'reverse angle' view



STRIKE A BALL MORE THAN 300 yards, hit the flag as you chip onto the green or perform some other spectacular shot and you're rewarded with an instant replay of your effort - just the thing for rubbing your friends' noses in it.

BEFORE TAKING YOUR FIRST SWING, it's wise to get a taster of the hole from the overhead map. Bunkers (or sand traps as the Americans call them), roughs, trees and water are all displayed along with the distance and par.

ARRIVAL AT THE GREEN signals the appearance of the isometric view of the putting surface. This shows what the state of the green is like in the form of bumps and hills.



PUTTING TENDS TO WORK in the same way as normal strokes, except that the ball stays closer to the ground. This time the distance is measured in feet and the range of the putter can be anything from five to 120 feet

COMMENT

IBM PC OWNERS have long been able to savour the delights of chipping their balls onto the green, lying in heavy rough and getting a double bogey. Now, thankfully, all of you Amiga caddies can earn yourselves a handicap too, thanks to a brilliant conversion. Not that there aren't a few flaws: the disk-accessing isn't as smooth as it could be, the 'fly-by' feature is more of a jerk-by and the isometric green view has the annoying habit of appearing when completely unnecessary (when you're four inches from the hole for example). All but the disk-accessing can be switched off though (to be called up manually when required), so nothing major is lost from the gameplay. And that's it for the gripes, everything else has retained the energy and playability of the original PC version. The added sound effects - birds chirping in the trees, crowds 'oohhing' when you narrowly miss a putt and cheering wildly when you birdie a hole - just serve to emphasise how much attention has been paid to detail and lend further weight to the theory that *PGA Tour Golf* is *the* best golf game currently available.

Paul Presley

DAS BOOT
Three Sixty and Mindscape

PRICE
£30.64

OUT
NOW

GRAPHICS
91%

SOUND
87%

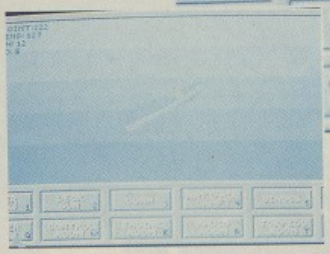
PLAYABILITY
92%

VALUE
88%

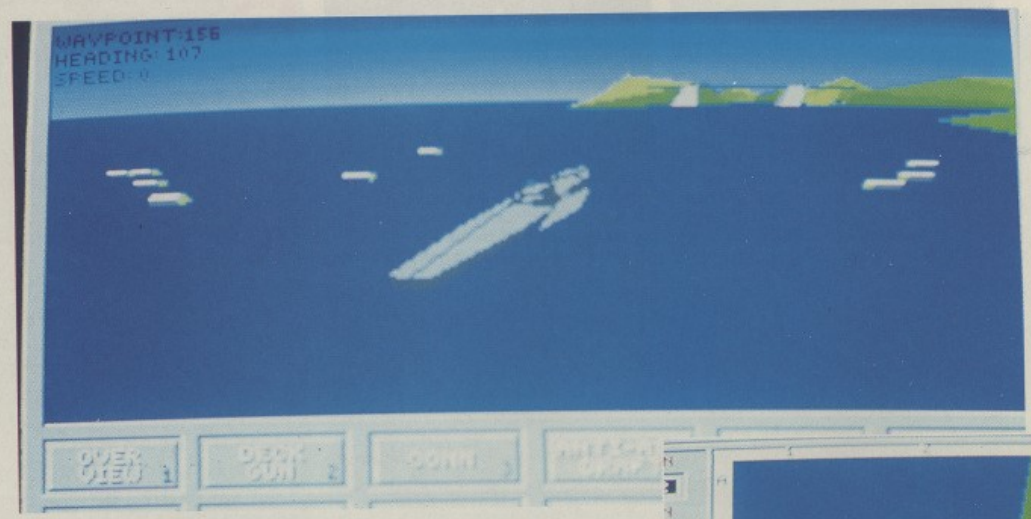
OVERALL
91%

DAS B

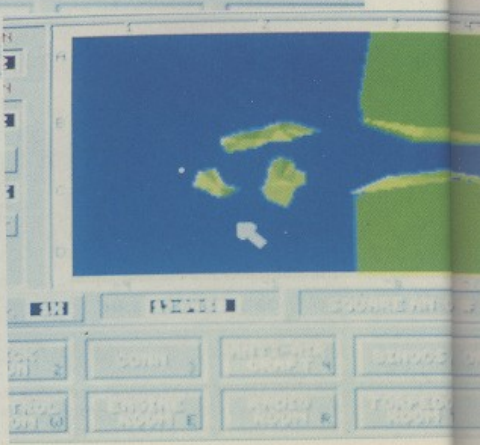
UNLIKE OTHER SIMULATORS, the external views are more than just pretty graphics. The most efficient way of controlling your U-Boat comes from the outside views, allowing you to navigate mine fields, observe targets and spot incoming planes. There are two views, above water and...



...underwater. The submerged viewpoint is necessary because, you may be surprised to learn, submarines travel below the surface.



ONE OF THE MOST nerve-racking moments underwater is when your helmsman cries out, "Mines detected". Negotiating a minefield is a slow, tricky business, requiring constant course changes and travelling at a snail's pace.



THE HMS GRAPH - A BRITISH U-BOAT

During October of 1941, the allied naval forces made the capture of a lifetime - the German U-boat U570. The U570 was one of the most efficient and deadly submarines involved in World War II and under normal circumstances would have been scuttled (destroyed) before falling into enemy hands. Unfortunately, the U-boat commander didn't have a lot of say in the matter.

While on a routine patrol, a British Hudson aircraft had spotted the submarine diving south of Iceland. Having made a report, the aircraft again spotted it surfacing underneath it. The commander had failed to check his periscope. In an instant the Hudson was dropping depth charges all around it as the boat tried to dive to safety. Luck was not on his side as detonations rang around the hull.

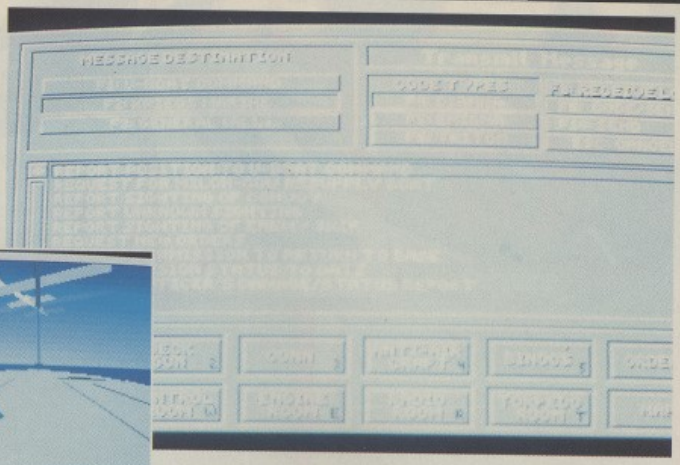
The commander now only had two choices, surface and surrender or continue diving. The latter option was ruled out due to instrument damage - he had no way of knowing how deep he was or where the sea bed was. Destroying any secret papers on board the commander surfaced and tried to scuttle the ship. However, the British patrol boats sent to help out the Hudson threatened to leave the men in the water if they tried to destroy their prize catch

A year passed while the U-boat was thoroughly researched by experts and engineers before it re-entered the war, now against its former masters, as the HMS Graph, operating in the Bay of Biscay

BOOT

Germany, 1941. A sleek black submarine pulls away from the dock before slipping under the icy waters and making its way towards the Atlantic. Another of the feared U-Boats has entered World War II with you at the helm... but wait a minute? You're on the wrong side, surely?

If you hadn't guessed already, *Das Boot* puts you in charge of a German U-Boat, and if you can put up with this affront to British patriotism then you get to engage in various missions of destruction throughout World War II.



ORDERS FROM GERMAN Headquarters usually arrive in coded format, to make life hard for any allied spies. To decode them you simply select one of the three codes until the message makes sense.

ONE FORM OF 'TOPSIDE' armament is the deck gun. Despite being virtually useless against aircraft, the destructive power makes it an ideal weapon against ships, buildings and other large targets.

YOUR PRINCIPLE ENEMY comes from above. Bombers are the biggest threat to a submarine, requiring you to submerge quickly or return fire with your anti-aircraft gun. Although heavy and rather unsteady, each round is capable of wiping out a plane.

EACH MISSION REQUIRES you to be at a certain place at a certain time, so waypoints are plotted on the map to guide you in the right direction, avoiding areas of land and shallow water wherever possible.

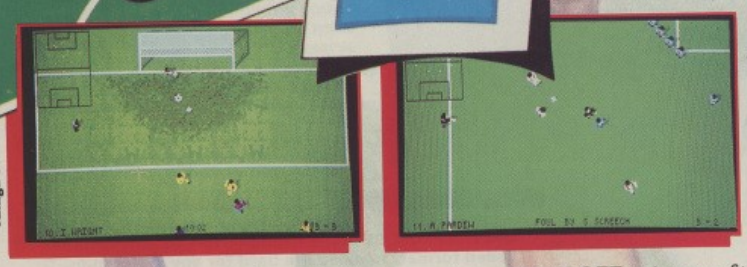
THE MOST FAMILIAR weapons on a submarine are the torpedoes. Firing them isn't as easy as pushing a button, remember, this is World War II – to hit a target you have to calculate the enemy's distance, speed and direction, then hope he doesn't turn around.

COMMENT

THE DIFFERENCE between *Das Boot* and other submarine simulators is that it's easy to jump right in and start playing, thanks to the easy control method. Everything is laid out on the screen and it's all self-explanatory. Navigational controls are simple and the external views prove to be really useful when trying to steer along a narrow fjord or through a minefield. There is a slight problem with mines in that the collision detection between the submarine and the mine is slightly off – unfortunate, when you consider what's at stake. Even passing nearby will set it off – usually just when you think you're at a safe distance. And what's worse, if you leave the external view for a moment then return later, the mines appear to have moved into different positions. Other areas work perfectly, in particular the sending of coded transmissions is a nice touch and the all-action aircraft shooting is great fun. The most favourable compliment you can pay Das Boot is to say that it's got all the involvement of a submarine simulator combined with the playability of an arcade-style game, such as *Carrier Command* – it certainly conveys the same feeling of overall control and involvement as the ageing Realtime 3D extravaganza. Make no mistake though, this is far more than just a 3D shoot 'em up: Das Boot is to submarine games what *Red Baron* is to WWI flight sims.

Paul Presley

KICK OFF 2



Amiga Screen Shots

A NEW DIME
SOCCER SIM

-GOLDEN JOYSTICK-

GAME OF THE YEAR

1 9 9 1

- BLISTERING PACE
- PIXEL PERFECT PASSING
- SUPERB TACTICAL GAMEPLAY

KICK OFF 2 greatly enhances the gameplay of KICK OFF, winner of the THE GAME OF THE YEAR in the U.K., and similar awards right across Europe. A host of new features have been added to the ones that enthralled players the world over.

* **Full size multi-directional scrolling pitch with the players, markings etc. in correct proportion.**
* **1 to 4 players option. (Amiga and ST only)**
* **2 players TEAM option against the computer or 2 other players. Hundreds of players each with a unique combination of attributes (stamina, pace, etc.) and skills (passing, shooting, tackling, etc.)**
* **Instinctive Kick Off joystick controls to dribble, pass, shoot, head or chip the ball and do sliding tackles.**
* **Set piece. FREE KICKS including dummies and the ability to dip the ball or bend the ball round a defensive wall.**
* **9 types of corner kicks with full control of shot power. Long and short throw ins.**
* **Team selection from a squad of 16 with substitution and a choice of tactics.**
* **League and cup competitions with Extra Time, Injury Time and sudden death penalty shoot outs.**
* **Facility to view, edit and save the Action Replays and create a Golden Shots disc.(Excl. IBM & CBM 64)**
* **Facility to load Player Manager teams and tactics for a single or league game.**
* **Red and yellow cards, 16 different referees, injury time and a host of features to create an atmosphere for a game which is real fun to play.**

ST ACTION - The best game ever to grace the ST. Highest accolade I can give.
AMIGA USER INT - The best computer game ever **97%**
THE ONE - Ultimate soccer simulation. **96%**
THE ACE - Brilliant. Buy, Buy, Buy. **930.**
AMIGA FORMAT - Best footy game to have appeared on any machine. **94%**
ST FORMAT - What a game! Gem to play. Magic. **90%**
C & VG - Championship winning material. **95%**
GAMES MACHINE - Probably the best sports game ever. **92%**
COMMODORE USER - No other footie game can touch it. **90%**
AMIGA ACTION - Surpasses all other football games. **93%**
POPULAR COMPUTING WEEKLY - Nothing short of brilliant.
NEW COMPUTER EXPRESS - Computer football event of the year.

AMIGA & ST £19.99 EXP. AMIGA £24.99
IBM (AT & XT Turbo, EGA & VGA) £24.99
CBM 64 - SPECTRUM - AMSTRAD £9.99, £14.99

An International class player takes charge of a third division club as Player Manager. His brief is simple **-Bring Back The Glory Days.**

His success depends on his playing skills on the pitch and managerial skills in devising winning tactics, aquiring the right players from the transfer market and building a team worthy of the highest honours.

* **Unique facility to design and implement your own tactics.**
* **Over 1000 individual players, each with a unique combination of attributes and skills.**
* **A lively transfer market. Haggle for the best deal.**
* **4 division league and a cup tournament with sudden death penalty shoot out.**

The Player Manager brings the every day realities of a manager's life, his talents as a manager and a player, his triumphs and his failures into a sharp FOCUS.

ST. ACTION - A stroke of pure genius.
THE ONE - An exceptional football management simulation. Astounding depth. Most involved, rewarding and playable.
THE ACE - Successfully blends challenging soccer management with frantic end to end arcade action. **920**
NEW COMPUTER EXPRESS - The sheer depth is incredible. A definitive management game.
COMMODORE USER - At last a management game that requires true management skills - a winner. **94%**
ST FORMAT - Brilliant. **93%**
AMIGA FORMAT - Enthralling and addictive. **93%**
ZZAP - Best football management game ever written. **92%**

AMIGA - ST £19.99

IMENSION IN SIMULATIONS

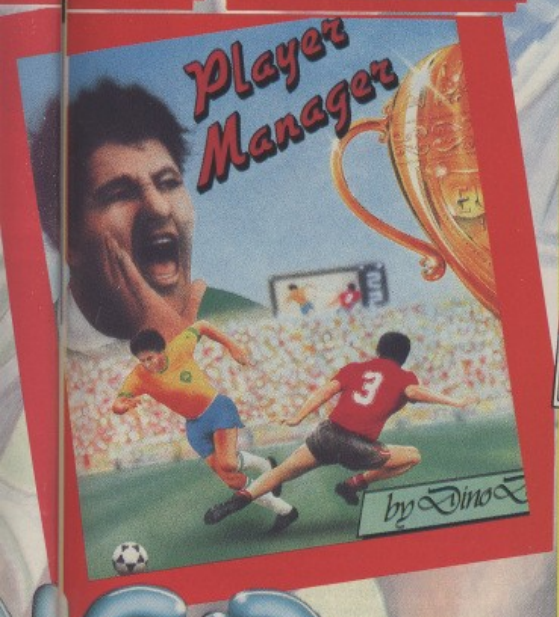
THE FINAL WHISTLE
Amiga - ST £12.99 (Rel. Nov.)

Raises the skills required and gameplay of KICK OFF 2 to new heights.

Two extra kits.
Look at any player stats. (attributes and skill) before selecting squad.
Totally new corner kicks with full control of the power, height and trajectory of the ball.
Enhanced throw ins and penalty shots.
Provision to flick the ball in the air and do a blinding header or a spectacular overhead kick.
New two players team mode. Player 1 in position or nearest to the ball and player 2 in position or keeper.
Linesmen and referee on the pitch.
A new player attribute FLAIR. A player with a high level of flair will try a solo attempt at the goal.
4 new pitches - Wembley - Icy - Muddy - Non-League

And Lot's More

WINNING TACTICS (£6.99 - Rel. Nov.) - A collection of tactics for use in Player Manager or KO2 with full explanations.
RETURN TO EUROPE (£9.99 - Rel. Dec.) - Three European cup competitions. UEFA cup - European Cup - Cup Winners Cup.
GIANTS OF EUROPE (Rel. 1991) Best teams of Europe on one disc.



Draft specifications. Subject to changes without notice

ANCO SOFTWARE, UNIT 10, BURNHAM TRADING ESTATE, LAWSON ROAD, DARTFORD, KENT.
TELEPHONE No: 0322 92513/18 FAX No: 0322 93422

CHUCK ROCK

CHUCK ROCK
Core Design

PRICE
£24.99

OUT
NOW

GRAPHICS
91%

SOUND
91%

PLAYABILITY
87%

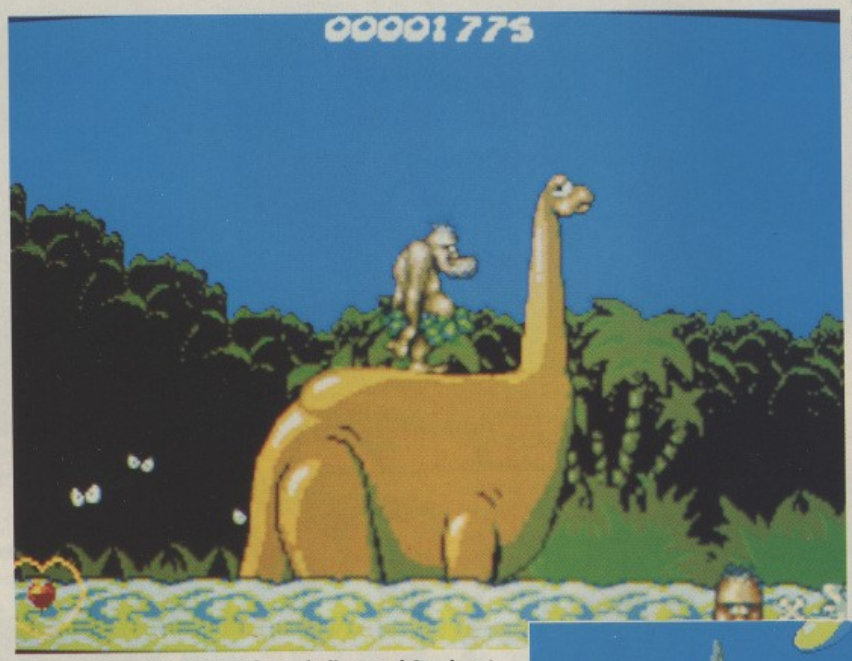
VALUE
90%

OVERALL
91%

Ooger Booger! Is the sort of noises you would expect to hear from Core Designs' new character, Chuck Rock is set in the middle of the stone-age when little birds are used for clothes pegs and the invention of the wheel has just been announced on the news.

Chuck has a dilemma, his lovely, sexy and, lets face it, quite nice wife Ophelia has just been wife-napped by the evil character Gary Gritter. The scene is set, Ophelia is hanging out the washing, while Gary is snooping around in the bushes, quickly Gary dashes out and hits Ophelia on the head with his club, she is then dragged off with Gary pulling on her hair.

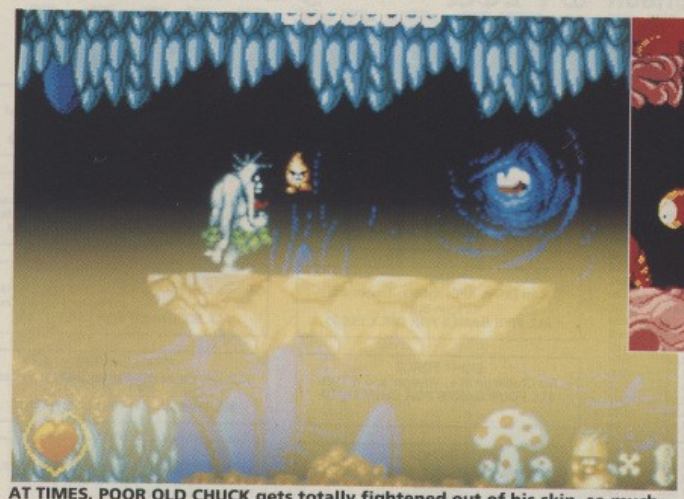
Meanwhile our hero Chuck is indoors watching the news, he senses something is going on so he quickly rushes out (forgetting he has no clothes on) and looks around, fortunately a bird saw what happened and informs Chuck of the direction that Gary disappeared in, quick as a flash Chuck goes to the nearest bush and makes a home-made loin cloth and sets off to the rescue...



CHUCK BEGINS HIS SEARCH for Ophelia. Level One is set in the jungle with little orange dino's prowling around and if you're not careful they'll whip out a large hammer and attempt to smack you on the head withit! Not all dino's are violent towards you, some even help you, for example the nice croc' aimlessly lying on a rock is just waiting for you to come along with a rock, jump on it's tail and throw the rock onto his head, this results in you being catapulted through the air and ending up on aledge somewhere. If you're really lucky you could get a ride on the back of a great dino' which plods it's way through the lake and drops you off at the other side (very nice!).

IF YOU'VE EVER WANTED to have a mud bath, here's one with a difference - the smelly excrement of a giant dino' is the difference, eeruugghh! Yuk! Yuk! Not everyone's choice of a luxury, but that's all you can get in the stone age. If you find you're suddenly attached by a horde of rampant rocks on the run...(quick breath)...your best bet is to try to pick up the nearest rock to protect your bonce.

SWIMMING MAY BE one of Chuck's many talents, but he's not that good at holding his breath: If he's held down for too long he'll start thrashing about desperately trying to get to the surface. Some wonderful things have been expressed in this section, just have a look at swordfish after you've kicked him in the nose.



ONCE INSIDE THE DINO' you're treated to atmospherically-intestinal graphics - there's even bouncing hearts skipping about to cause you trouble.

AT TIMES, POOR OLD CHUCK gets totally fightened out of his skin, so much so that he literally turns white and his hair sticks up everywhere, a very weird sight indeed! After a while he pulls himself together and eventually gets his old colour back.

IN THE ICE AGE it's cold... to say the least - you can tell by the hot air coming out of Chuck's mouth as he wanders around freezing his feet off. One good thing about the setting though, is that you'll come across loads of mammoths to help you on your way, some catapult you through the air and some suck you up and blow you out, but whichever one you get they all help in one way or another.

THE GRAVEYARD OF THE DINOSAURS is full of... dead dinosaurs! In order to help you in this level, snakes turn into bridges when they'rebelly-butted. Some of the dino's turn into angels or devils after they've been belly-butted, depending on their mood, so watch out, 'cos the devil will chase you.

AT THE END OF THE DINO'S GRAVEYARD you have to enter the mouth of a great dino' which is lying down having a breather. Once you're inside, his (or her) teeth fall out - yet another nice touch.

COMMENT

AS SOON AS YOU SEE CHUCK and the rest of the cast strumming away on their electric guitars accompanied by a 'ROCK' track, you'll instantly realise that humor is the key element of this game. The main character is very well animated with over 40 frames which include movements such as walking (obviously), jumping, picking up and throwing a rock - and even being blown across the screen by a mammoth! Sonically, the player is treated to a choice of either in-game effects or music: it doesn't really matter which one you pick, as both are equally as good, the music being along the same lines as the aforementioned intro track (which is the sort of thing anyone would want to boogie on down to) while some of the effects have to be heard to be believed. It's obvious that Core Design has spent a great deal of time on the thought, design and general preparation of this game - so the player is going to have to put a little in too: for example, at one point you come to what seems like an impossibly large gap and the only things to be seen are a Pterodactyl nodding off and an unreachable ridge - what do you do? Simple, you belly-butt the Pterodactyl and he'll whizz you across the gap while clutching onto your locks (Ouch!). With the program containing over 500 frames of animation in total, there are plenty of 'baddies' to 'belly-butt' or 'fly-kick' with your size 14 feet, ranging from 'blue-waddlers' to 'flying bone-birds'. If you don't take your computer too seriously, you fancy a great laugh and lashings of stomping, puzzle-solving and general fun and chaos, then this is definitely the game for you. A must for anyone's collection.

Juilan Watsham

Legend Software

16 Linden Gardens, Chiswick, London W4 2EQ
Fax: 081-995 1325
Telephone: 081-747 4757/081-742 1831

TOP TITLES

TITLE	ST	AMIGA
Half Meg Upgrade	N/A	29.99
3D Construction Kit	25.99	25.99
1 Meg Cricket	N/A	16.99
4D Sports Boxing	16.99	16.99
688 Sub Attack	16.99	16.99
Agony	18.99	18.99
A10 Tank Killer	18.99	18.99
Alcatraz	15.99	15.99
Action Station	N/A	18.99
Bandit King of Ancient China	21.99	21.99
Alpha Waves	15.99	15.99
Armourgeddon	15.99	15.99
Advanced Destroyer Sim (A.D.S.)	18.99	18.99
Addidas Golden Shoe	15.99	15.99
Atomic Robo Kid	15.99	15.99
A.W.S.O.M.E.	18.99	18.99
Amazing Spiderman	15.99	15.99
ATF II	15.99	15.99
Blue Max	18.99	18.99
Battle Command	14.99	14.99
Billy the Kid	14.99	14.99
Brat	15.99	15.99
Battle Master	18.99	18.99
Barbarian II (Psyghosis)	16.99	16.99
Back to the Golden Age	16.99	16.99
B.A.T.	22.99	22.99
Battle Hawk 1942	16.99	16.99
Battle Chess	16.99	16.99
Battle Chess II	16.99	16.99
Back to the Future III	15.99	15.99
Blade Warrior	16.99	16.99
Bomber Bob	16.99	16.99
Brain Blaster	16.99	16.99
Betrayal	18.99	18.99
Buck Rogers	18.99	18.99
Chips Challenge	16.99	16.99
Cabal	N/A	14.99
Cyberon III	16.99	16.99
Colditz	18.99	18.99
Chase HQ	14.99	14.99
Chaos Strike Back	16.99	16.99
Chuck Rock	15.99	15.99
Chase HQ II	14.99	14.99
Captive	15.99	15.99
Carve Up	14.99	14.99
Cruise for the Corpse	16.99	16.99
Crime Wave	16.99	16.99
Cadaver	16.99	16.99
Celica GT4 Rally	15.99	15.99
Chuck Yeagers ATF	15.99	15.99
Centurion	16.99	16.99
Carthage	16.99	16.99
Corporation	9.99	9.99
Dragon Lair II (Timewarp)	26.99	26.99
Dragon Wars	16.99	16.99
Dynamite Debugger	15.99	15.99
Dragon Lair	26.99	26.99
Dragon Ninja	13.99	13.99
Days of Thunder	15.99	15.99
Dick Tracey	15.99	15.99
Epic	14.99	14.99
ESWAT	16.99	16.99
Euro Superleague	13.99	13.99
F16 Combat Pilot	16.99	16.99
F19 Retaliator	14.99	14.99
F19 Stealth Fighter	19.99	19.99
Final Conflict	16.99	16.99
Final Whistle	8.99	8.99
Feudal Lords	16.99	16.99
F117A	21.99	21.99
Fore Play	15.99	15.99
Flight of the Intruder	18.99	18.99
F15 Strike Eagle I	18.99	18.99
Future Baseball	16.99	16.99
Gunship 2000	21.99	21.99
Genghis Khan	21.99	21.99
Gettysburg	18.99	18.99
Gauntlet III	16.99	16.99
Gods	15.99	15.99
Golden Axe	15.99	15.99
Golden of the Aztecs	15.99	15.99
Gun Boat	16.99	16.99
Harpoon (1 Neg)	19.99	19.99
Hill Street Blues	18.99	18.99
Hard Drivin II	14.99	14.99
Hawk	19.99	19.99
Heros Quest (1 Meg)	21.99	21.99
Imperium	16.99	16.99
Immortals	15.99	15.99
Iron Lord	15.99	15.99
International Ice Hockey	16.99	16.99
Indianapolis 500	16.99	16.99
Ishido	18.99	18.99
Ivanhoe	14.99	14.99
James Pond	14.99	14.99
Jupiters Masterdrive	15.99	15.99
Killing Cloud	15.99	15.99
Kick Off II (1 Meg)	15.99	15.99
Kick Off II (Half 1 Meg)	12.99	12.99
Lemmings	15.99	15.99

TOP TITLES

TITLE	ST	AMIGA
Lost Patrol	14.99	14.99
Line of Fire	16.99	16.99
Loom	18.99	18.99
Last Ninja III	15.99	15.99
Leisure Suit ?????	21.99	21.99
Lotus Esprit	15.99	15.99
M1 Tank Platoon	19.99	19.99
Magnetic Scroll	18.99	18.99
Metal Master	15.99	15.99
Mad Professor Moriarti	15.99	15.99
Midnight Resistance	14.99	14.99
Midwinter	19.99	19.99
Midwinter II	19.99	19.99
Moonshine Racers	15.99	15.99
Myth	15.99	15.99
Mystical	15.99	15.99
Mig 29 (Fulcrum)	21.99	21.99
Monkey Island	16.99	16.99
M.U.D.S.	15.99	15.99
Murder	16.99	16.99
Nam 1965-1975	18.99	18.99
Narc	14.99	14.99
Nightshift	16.99	16.99
Nightbreed (Arcade)	14.99	14.99
Navey Seals	14.99	14.99
Nightbreed (Adventure)	14.99	14.99
Neverending Story II	16.99	16.99
Ninja Remix	14.99	14.99
Nitro	15.99	15.99
Obitus	21.99	21.99
Operation Stealth	16.99	16.99
Operation Thunderbolt	14.99	14.99
Pang	14.99	14.99
Predator II	15.99	15.99
PGA Golf Tour	16.99	16.99
Plotting	14.99	14.99
Panza Kick Boxing	16.99	16.99
Puznic	14.99	14.99
Paradroid 90	16.99	16.99
Populas + Sim City	21.99	21.99
Powerhouse	18.99	18.99
Prince of Persia	15.99	15.99
Rainbow Islands	14.99	14.99
Renegade (Coin Op – Hits)	14.99	14.99
R-Type II	16.99	16.99
Rick Dangerous II	16.99	16.99
Robocop	13.99	13.99
Robocop II	14.99	14.99
Rogue Trooper	14.99	14.99
Savage Empire	19.99	19.99
Star Trek V	16.99	16.99
Shadow Warrior	14.99	14.99
Sim Earth	16.99	16.99
Star Control	16.99	16.99
Super Cars II	15.99	15.99
Shadow of the Beast II	15.99	15.99
Shadow Dancer	16.99	16.99
Sly Spy	14.99	14.99
Ski or Die	16.99	16.99
Space Age	26.99	26.99
Speedball II	15.99	15.99
Snow Joke	15.99	15.99
Spider II	15.99	15.99
Super of Road Racing	15.99	15.99
Super Monaco	16.99	16.99
Switch Blade II	15.99	15.99
Spindizzy Worlds	16.99	16.99
Supremacy	19.99	19.99
SWIV	15.99	15.99
Team Suzuki	15.99	15.99
Team Yankee	19.99	19.99
Teenage Mutant Heroes	16.99	16.99
The Punisher	16.99	16.99
Railroad Tycoon	16.99	16.99
Test Drive III	15.99	15.99
Their Finest Hour	19.99	19.99
Torvak the Warrior	15.99	15.99
Toki	14.99	14.99
Total Recall	14.99	14.99
Tournament Golf	16.99	16.99
Turrican	14.99	14.99
Turrican II	15.99	15.99
Ultimate V	18.99	18.99
Ultimate Ride	16.99	16.99
UMS	18.99	18.99
UN Squadron	15.99	15.99
USS John Young	16.99	16.99
Vaxine	15.99	15.99
Vendetta	16.99	16.99
Viz	15.99	15.99
Voodoo Nightmare	15.99	15.99
Wings (Half Meg)	18.99	18.99
Wings (1 Meg)	18.99	18.99
White Death (1 Meg)	18.99	18.99
Warlock the Avenger	14.99	14.99
Wonderland	18.99	18.99
Wolfpack	18.99	18.99
Wrath of the Demos	18.99	18.99
Xiphos	16.99	16.99
Z Out	16.99	16.99
Zitrax	16.99	16.99

COMPILATIONS

HOLLYWOOD COLLECTION
RoboCop, Ghostbusters 2, Indiana Jones, Batman The Movie
ALL FOUR GAMES FOR ONLY £17.99

EDITION ONE
Double Dragon, Xenon, Gemini Wing and Silkworm
ALL FOUR GAMES FOR ONLY £15.99

POWER PACK
Xenon 2, TV Sports Football, Bloodwych and Lombard Rally
ALL FOUR GAMES FOR ONLY £14.99

SOCCER MANIA
Football Manager 2, Gazza's Soccer, Microprose Soccer and Football Manager 2 World Cup Edition
ALL FOUR GAMES FOR ONLY £16.99

TNT
Hard Drivin, APB, Xybots, Toobin and Dragon Spirit
ALL FIVE GAMES FOR ONLY £15.99

FULL BLAST
Chicago 90, Rick Dangerous, Highway Patrol 2, P47, Carrier Command and Ferrari Formula One
ALL SIX GAMES FOR ONLY 17.99

LIGHT FORCE
Bio Challenge IK+, Voyager and R Type
ALL FOUR GAMES FOR ONLY £14.99

CHALLENGERS
Kick Off, Super Ski, Fighter Bomber, Great Courts and Stuntcar Racer
ALL FIVE GAMES FOR ONLY £17.99

FUN BOX
Kult Purple, Saturn Days, Hostages and Op Neptune
ALL FOUR GAMES FOR ONLY £8.99

FLIGHT COMMAND
Eliminator, Strike Force Harrier, Lancaster, Sky Fox and Sky Chase
ALL FIVE GAMES FOR ONLY £12.99

MASTER MIX
Super Wonderbox, Turbo Outrun, Dynamite Sux, Thunderblade and Crackdown
ALL FIVE GAMES FOR ONLY £16.99

COMPUTER HITS VOL 2
Tetris, Joe Blade Golden Path and Black Shadow
ALL FOUR GAMES FOR ONLY £6.99

PLATINUM
Black Tiger Strieder, Forgottton Worlds and Ghouls and Ghost
ALL FOUR GAMES FOR ONLY £16.99

MIND GAMES
Austerlitz, Waterloo and Conflict in Europe
ALL THREE GAMES FOR ONLY £14.99

HEROES
Barbarian 2, Running Man, Star Wars andd Licence to Kill
ALL FOUR GAMES FOR ONLY £16.99

BIG BOX
Captain Blood, Safari Guns, Teenage Queen, Bubble Plus, Tin Tin on the Moon, Purple Saturn Day, Krypton Egg, Jumping Jackson, Bo Bo, Hostages
ALL TEN GAMES FOR ONLY £16.99

MAGNUM 4
Afterburner, Double Dragon, Operation Wolf and Batman Caper
ALL FOUR GAMES FOR ONLY £17.99

FIST OF FURY
Dynamite Dux, Shinobi, Ninja Warriors, Double Dragon II
ALL FOUR GAMES FOR ONLY £16.99

WHEELS OF FIRE
Hard Drivin', Chase HQ, Powerdrift and Turbo Outrun
ALL FOUR GAMES FOR ONLY £15.99

POWER UP
Altered Beast, Rainbow Island, X Out, Chase HQ, Turrican
ALL FIVE GAMES FOR ONLY £17.99

PRECIOUS METAL
Xenon, Captain Blood, Crazy Cars and Arkanoid
ALL FOUR GAMES FOR ONLY £14.99

BUDGET TITLES UNDER £10.00

Trivial Pursuit	N/A	8.99	Centrefold Squares	6.99	6.99
Photon Paint	N/A	8.99	Delux Strip Poker	6.99	6.99
Super Hang On	6.99	6.99	Daily Double Horse Racing	6.99	6.99
Afterburner	6.99	6.99	Colossus Chess	7.99	7.99
R-Type	6.99	6.99	Tank Attack	7.99	7.99
Batman Caped Crusader	6.99	6.99	Shadow of the Beast	8.99	8.99
Last Ninja II	6.99	6.99	Hawkeye	N/A	7.99
Thunderbird	6.99	6.99	Carrier Command	N/A	8.99
Blasteroid	6.99	6.99	Crazy Cars	6.99	6.99
Vigilante	6.99	6.99	Continental Circus	6.99	6.99
Road Blaster	6.99	6.99	Hitch Hikers Guide to Galaxy	8.99	8.99
WC Leaderbuard	6.99	6.99	Leather Goddess of Phobos	8.99	8.99
Gauntlet	6.99	6.99	Zork 1	8.99	8.99
Barbarian II	6.99	6.99	Cosmic Pirates	6.99	6.99
Axel Magic (Hammer)	6.99	6.99	Rotor	6.99	6.99
Old Run	6.99	6.99	Colorado	6.99	6.99
Silk Worm	6.99	6.99	Xenon	8.99	8.99
Double Dragon	6.99	6.99	Grid Runner	6.99	6.99
After Burner	6.99	6.99	Gemini Wing	6.99	6.99
Wizball	6.99	6.99	Operation Wolf	6.99	6.99
Arknoid II	6.99	6.99	Defender of the Crown	8.99	8.99
Future Bike	6.99	6.99	Forgotten Worlds	6.99	6.99
Hong Kong Phoey	6.99	6.99	Switch Blade	6.99	6.99
Michael Jackson Moonwalker	6.99	6.99	Speedball	8.99	8.99
Def of the Earth	6.99	6.99	Daley Thompson Olympic Chall.	6.99	6.99

0898-666416 24 HOUR CREDIT CARD LINE

Please make cheques and PO's payable to Legend Software

Computer _____

Title _____ Price _____ Title _____ Price _____

_____

_____

_____

Access ☐ Visa ☐

Date _____

Name _____

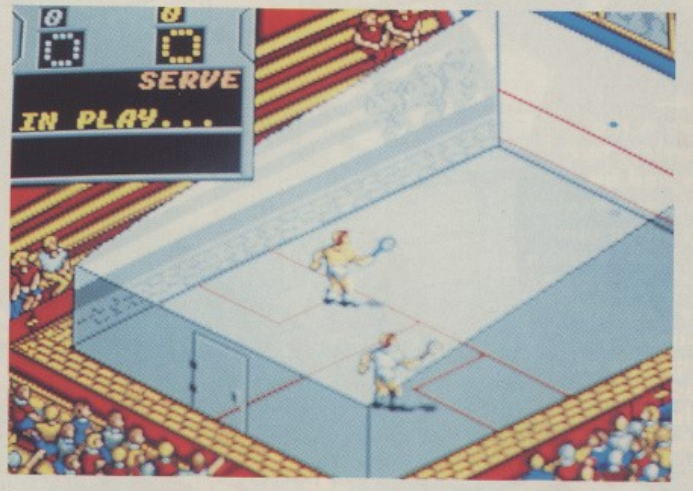
Address _____

_____

_____ Postcode _____

Telephone _____

JAHANGIR KHAN'S WORLD CHAMPIONSHIP SQUASH



EACH GAME LASTS until one player scores nine points, but points are only awarded if you served the ball. Each shot has to hit the back wall once and the ball is not allowed to bounce more than once on the floor although there is no limit to the number of times it can hit the other three walls.

JAHANGIR KHAN'S WORLD CHAMPIONSHIP SQUASH
Krisalis
PRICE £25.53
OUT NOW
GRAPHICS 90%
SOUND 91%
PLAYABILITY 92%
VALUE 90%
OVERALL 91%

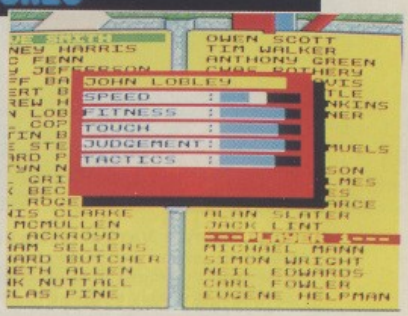
GET TWO PEOPLE, put them in a small room with two racquets and a small blue ball, tell them to hit it against the wall and name the game after a fruit drink. The essence of squash is simply tennis on half a court, but it is regarded as one of the toughest (and most tiring) sports in the world.

There has only ever been one computerised version of the sport - *Jonah Barrington's Squash* on the Spectrum and C64. But all that has changed thanks to Krisalis Software. *Jahangir Khan's World Championship Squash* combines an isometrically-viewed arcade game with the managerial skills of the footballsimulation, *Manchester United*.

THE KNOCK-OUT tournament comprises of 32 players all vying for the championship trophy, with the top eight seeded. Any or all of the players can be placed under human control (should you know 31 other squash enthusiasts).

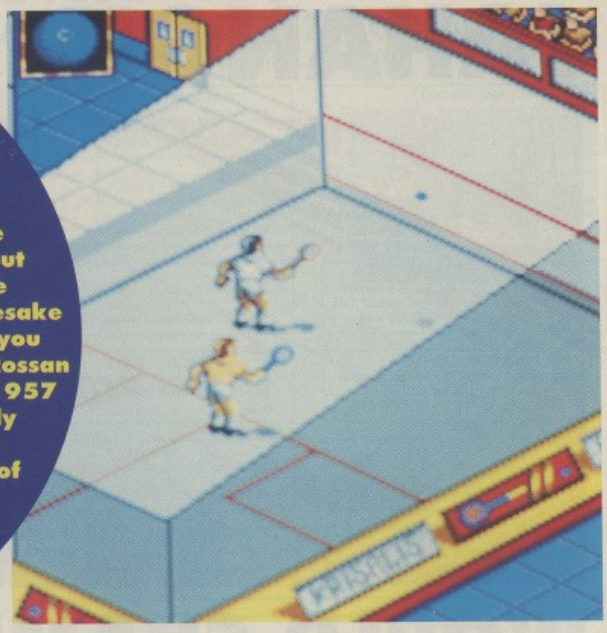
THE LEAGUE CHAMPIONSHIP is set up as a ladder: eight divisional rungs with five players in each. At the end of each season the top two players climb up a rung while the bottom two go down. Once again, any number of human players can take part.

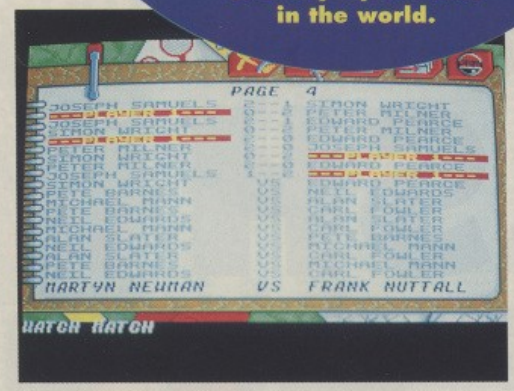
EACH PLAYER IS defined by five attributes: Speed, Fitness, Touch, Judgement and Tactics. For humans, the latter two are provided by your own skills, while the first three are increased as the league progresses.



JAHANGIR KHAN

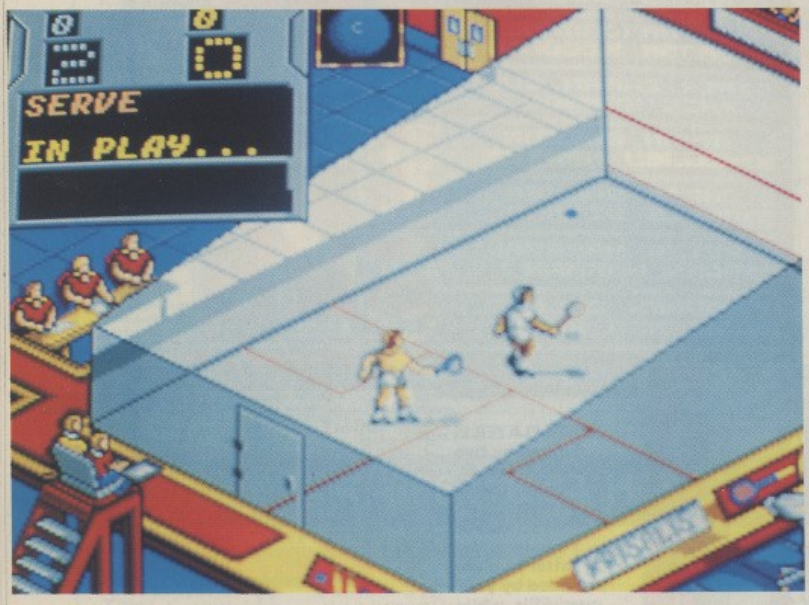
Jahangir Khan is not, as some people believe, a distant relative o the infamous 13th century Mongol warrior, but put a squash racket in his hands and he becomes as deadly on the court as his namesake was with an axe - hardly surprising when you consider his family background. His father, Rossan Khan, was the British Squash Champion in 1957 and most of his brothers are also heavily involved in the squash circuit. Literally translated, his name means 'conqueror of the world' and he certainly lives up to it. Khan is unbeaten in his last 500 games and is the holder of every squash title in the world.





A SEASON CONTAINS four matches each against a players of varying skill. Not only are you able to play in a match, you also have the option to sit in the crowd and just watch the others play their games. Rather like scouting the opposition.

TO HIT THE BALL, just move the joystick in one of eight directions and press the button. Three degrees of strength are available from volleys to lobs, all designed to confuse your opponent.



THERE ARE TWO WAYS of telling how good a player is: watching his previous matches and seeing how big the crowd is. Players like Jahangir Khan pack the house and pull in the television crews, whereas your first game will probably only pull in your immediate relatives.

COMMENT

WHETHER IT'S BECAUSE squash is a fiendishly difficult game to program on a computer, or whether it's because it is still considered a 'minority' sport, there haven't been a great deal of squash games, which is a pity if the quality of Krisalis' effort is anything to go by. Although Jahangir Khan combines both a sport sim and a managerial game, it hasn't gone overboard on either, enabling them to flow freely together. Mass-scale championships are definitely in the offing. The game is full of little touches from the way the crowd size increases as your performances get better to the way the different coloured balls affect each game – blue balls are fast and bounce all over the court while heavy yellow ones make for a lot of running around. The biggest drawback is that until you get the hang of the control method, most games are going to end as 9-0 losses. Fortunately, the easy control option helps you work on your positioning first before you start trying to control your shots. It doesn't take too long to get the hang of things and as soon as you do, you're in for one of the best ball sport games to come along for a long time.

Paul Presley

GO WiLd!

No ugly wart-nose is gonna make a monkey out of me! But that's just what that witch has done - one minute I'm the mighty Toki and the next I'm having breakfast delousing my armpits, I can't walk a step without tripping over my knuckles and, oh, there's an overhanging vine - time to swing out sister! But my broken heart is going ape. My beloved Miho (I can't wait to share a banana with her) has been kidnapped and somehow I've got to regain my manhood - until then I'm just swingin' in the rain!
The arcade sensation by Fabtek Inc. is now available for your micro.

ocean

SPECTRUM . AMSTRAD CARTRIDGE
COMMODORE CARTRIDGE
ATARI ST . AMIGA

OCEAN SOFTWARE LTD, 6 CENTRAL STREET, MANCHESTER M2 5NS.
TEL: 061-832 6633 FAX 061-834 0650

CADA
THE PA

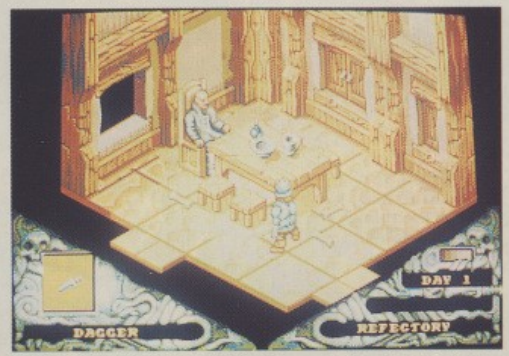
CADAVER
THE PAY-OFF
Renegade

PRICE
£14.99
(Original Cadaver disk required)

OUT
NOW

GRAPHICS
92%
SOUND
75%
PLAYABILITY
92%
VALUE
87%
OVERALL
88%

KARADOC ARRIVES OUTSIDE THE TAVERN: this is the very first location and already he's got problems. The door is locked, and there's no other way in. That slot is probably the way to get the door open, but what the hell goes into the slot?



AT LAST, HAVING WANDERED through the deserted inn, you come across some form of human life. He wants his supper, in return for which he'll give you some vital information. It sounds simple enough, but things are not quite what they seem.

LIFE'S NOT EASY when you're a dwarf. You battle your way through five excruciating monster-infested levels, set off to collect your reward, and what happens? The gits who sent you on that impossible quest seem to have buzzed off, reward and all.

And as if that wasn't insult enough, everybody else in the Charon Arms, where you began your quest, has disappeared too, so you can't even get yourself a free mug of mead for your pains.

So begins the second great adventure of Karadoc The Dwarf, the stunted hero of *Cadaver*. On arriving at the tavern all you are aware of is that everybody seems to have disappeared in mysterious circumstances, and since they have your reward, you've got to find them.

The Pay-Off is smaller than Cadaver, about two-thirds the size, with only four levels of 250 rooms. The Bitmap Brothers reckon that while a good player (with a solution) should take around seven hours to play right through the first game, this one will only take about three hours to replay once solved.

Don't be put off by the smaller size of this module though, it's tougher than Cadaver, so although you don't need to have completed the latter to play this, it certainly helps.

The first level is set in the Tavern itself, and is just a small collection of rooms which set the scene, but even at this early stage you have to work hard for every clue.

Next, it's on to the village itself. This shows the power of the Cadaver game system, because this level is actually laid out like a true village with streets and houses. Unlike most of the levels in this module and the original game, the Village has a far greater monster-bashing bias, which should relieve those whose brains hurt.

The largest level is the Temple - and whereas the first two use completely new graphic sets, this, and the concluding level in the caves are re-hashes of two of the original Cadaver levels, and are both tough enough to have even the meanest Cadaver players burning the midnight oil.

You have been warned...

DEADLY DESIGN

CADAVER BEGAN OVER TWO AND A HALF YEARS AGO as a simple map-maker on the ST to create isometric 3D arcade/adventure games. It was named *Adventure Level Editor* (which sounds a lot more palatable as an acronym: ALE), and has since grown into an extremely powerful utility.

ALE makes life easy for the designer because each level is initially created as a two-dimensional map, the purpose of which is to define the size of each room (from three by three to 10 by 10 floor tiles) and show the interconnections between them.

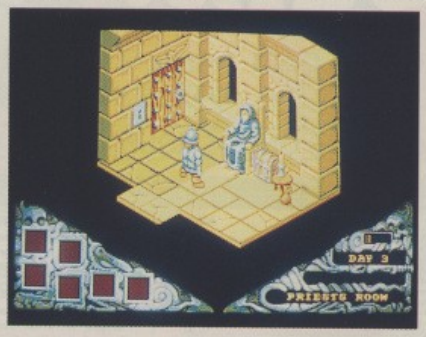
Having created the map the designer can then select any room which is instantly converted to a 3D shell. The room is then given its individuality by 'painting' on previously defined background features. At this stage objects can also be selected from a pre-defined library and placed in the room.

This is where ACL comes in. ACL is a language designed by The Bitmap Brothers' own Steve Kelly to control the events in Cadaver and its sequels. The way it deals with objects is very clever. Each object placed in a room has a unique number, and associated with that number is a few lines of ACL code that tell the program exactly how to deal with that object under different circumstances. Can it be opened? Can you insert things in it? And so on.

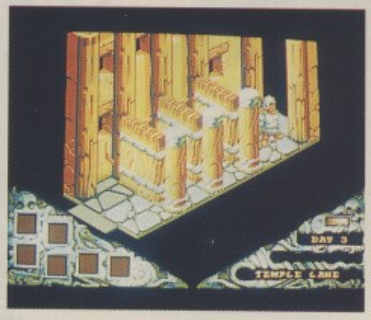
One of the characteristics that makes Cadaver such an absorbing game is that some objects can be opened to reveal other objects. For instance you might open a cabinet to find a small casket and then open the casket to find a key. In this case both the casket and the key are kept in special Attic rooms until they're needed. These are rooms that are on the map but can't be reached by the player. When an object is found it automatically removes itself from an attic room and places itself as near to its container as it can.

The language is also used to control events in each room, like doors locking and unlocking. Even the central character is not sacrosanct. ACL can be used to detect his position, and even push him about, overriding what you are doing with the joystick!

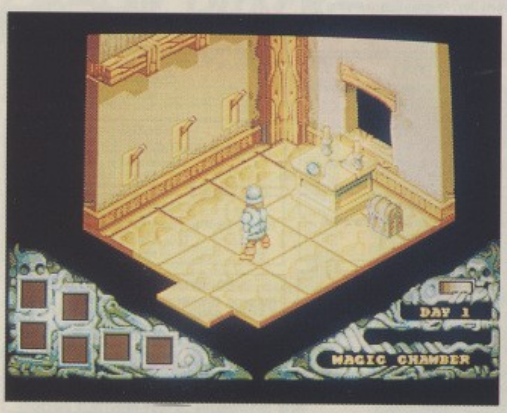
AVER AY-OFF



AH-HA! ANOTHER REAL PERSON. The Temple Priest may look like a kindly old man, but really he's a bit of a nasty old buffer. On first setting his beady eyes on you he sees you as potential slave material. You, of course, have other ideas.



IN THIS SCREEN YOU'VE JUST MANAGED to get access to the temple by getting from one end of this lane to another. That wasn't particularly easy because it involved some careful thought about the relationship between gates, levers and a piece of slime. How's it done?



HO HUM, HERE'S THE SORT OF TEMPTING THING that led so many games players astray in *Cadaver*. Three levers. You don't know what they do, but you want to find out. Pick a number, one to three, shut your eyes and hope...

NOW HERE'S A NASTY ONE. You want to get round to the other side so you can get to the keyhole. Trouble is, you could get spiked in a very nasty place. The pit, by the way, contains a couple of those brain creatures. Remember those bonny bouncers?

THE VILLAGE IS REALLY NICELY DESIGNED. You get an atmospheric feeling of tiny cobbled roads shadowed by close tiny buildings built in an 'olde worlde' style. Ooh it warms yer 'art, it really does...

COMMENT

THE PROBLEMS WITH LEVELS DISKS is that, on the whole, what you get are some new graphics and more or less the same gameplay, and very often that's not enough to justify a new product. Fortunately *Cadaver* was the sort of game that, even if you managed to complete it, left you wanting more. So once you've purchased more in the form of *The Pay-Off*, what exactly do you get for your money? True, there's the usual new graphics... but that ain't all. What makes this levels disk so worthwhile is that designing the original game seems to have been very much a learning experience for the Bitmap Brothers, with resultant improvements in almost every department becoming apparent here. Players who have completed Cadaver will enjoy the greater variety and continued challenge, while newer players may want to sample more of the first game before tackling this tougher nut.

Laurence Scotford

SOFTWARE CITY

Unit 4, B.D.C., 21 Temple Street, Wolverhampton. WV2 4AN.
Tel : 0902 25304. Fax: 0902 712751

CALL US ON : 24 HOUR CREDIT HOTLINE 0902 25304

EUROCARD · MASTERCARD · AMERICAN EXPRESS

AMIGA GAMES

	AMIGA
688 Attack Sub	16.99
A10 Tank Killer	24.99
A.M.O.S. The Creator	34.99
Advanced Destroyer Sim (New)	16.99
Afterburner	7.99
Amazing Spiderman	16.99
Ancient Battles	16.99
Ant Heads (It came from the Desert Add-on)	9.99
Arkanoid Revenge of Doh	7.99
Atomic Robokid	16.99
Axels Magic Hammer (New Price)	7.99
B.A.T.	19.99
Back to the Future 2 (Special Offer)	9.99
Back to the Future 3 (New)	16.99
Backgammon	16.99
Bar Games	16.99
Barbarian 2 (New Price)	7.99
Bards Tale 3 (New)	16.99
Batman the Caped Crusader	7.99
Battle Chess	16.99
Battle of Britain (Their Finest Hour)	21.99
Betrayal	19.99
Blasteroids	7.99
Blinky's Scary School	6.99
Blood Money	6.99
Blue Max	19.99
Bomber Bob	16.99
Boxing Manager	13.99
Bridge Player 2150	19.99
Bubble Bobble	16.99
Buck Rogers	24.99
Budokan	16.99
C.J'S Elephant Antics	6.99
Cadaver	16.99
Captive	16.99
Car-Vup	16.99
Carrier Command (Special Offer)	9.99
Centrefold Squares	9.99
Champions of Krynn (1 Meg)	19.99
Chase H.Q. 2	16.99
Chess Champions 2175	19.99
Chess Master 2100	19.99
Chips Challenge	16.99
Codename Iceman (1 Meg)	27.99
Colorado (New Price)	7.99
Continental Circus (New Price)	7.99
Corporation	9.99
Corporation + Mission Disc	16.99
Corporation Mission Disc	9.99
Crazy Cars (New Price)	7.99
Cricket Captain	16.99
Curse of Azure Bonds (1 Meg Only)	19.99
Daily Double Horse Racing	9.99
Daley Thomsons Olympic Challenge	7.99
Defender 2	13.99
Defender of the Crown (New Price)	9.99
Defenders of the Earth	7.99
Deluxe Strip Poker	9.99
Devpac 2	39.99
Disney Animation Studio	69.99
Donalds Alaphabet Chase	16.99
Double Dragon	7.99
Dragons Lair 2	29.99
Dragon Wars	16.99
Driller (New Price)	7.99
Duck Tales	16.99
Dungeon Master	16.99
Dungeon Master Editor	6.99
E.S.W.A.T.	16.99
Elvira Mistress of the Dark (1 Meg)	19.99
Emlyn Hughs Int Soccer	16.99
Emlyn Hughs Trivia Quiz (New)	16.99
Exterminator	16.99
F16 Combat Pilot	16.99
F29 Retaliator	16.99
Falcon Mission Disc 1 or 2	13.99
Famous Five (New)	16.99
Fantasy World Dizzy	6.99
Fast Food	6.99
Ferrari Formula One	6.99
Final Whistle	8.99
Fire Brigade (1 meg Amiga)	19.99
Flood	16.99
Football Manager	4.99
Football Director 2	13.99
Football Manager 2 + Expension Kit	9.99
Formula One Grand Prix	4.99
Fruit Machine	6.99
Future Basketball	16.99
Galaxy Force (Special Offer)	3.99
Galdrgaons Domain (New Price)	6.99
Gary Linekers Hotshots	16.99
Gauntlet 2	7.99
Gazza 2	16.99
Gemini Wing	7.99
Gettysburg	19.99
Ghengis Khan (1 Meg) (New)	27.99
Ghosts & Goblins (1 Meg) (Spec Off)	9.99
Go (New)	16.99
Golden Axe	16.99
Gooly's Railway Express (New)	16.99
Grand National	13.99
Gremlins 2	16.99
Gunship	16.99
Hard Drivin' 2	16.99
Harpoon (1Meg)	19.99
Hill Street Blues (New)	16.99
Hitchhikers Guide to the Galaxy	6.99
Hong Kong Phooey	6.99
Horse Racing (Special Offer)	12.99
Hostages	7.99
Hound of Shadow	6.99
Immortal (1 Meg Only)	16.99
Indianapolis 500	16.99
It Came from the Desert (1 Meg)	19.99
Jack Nicklaus Int Courses - Add On	8.99
Jack Nicklaus Ext Courses Vol 1	8.99
Jack Nicklaus Champ Courses 1990	8.99
Jack Nicklaus Vol 4 Courses	8.99
Jack Nicklaus Unlimited Courses (1 Meg) 19.99	
James Pond	16.99
James Pond (1 Meg)	16.99
Jaws (New Price)	7.99
Jet (Special Offer)	16.99
Jocky Wilsons Darts	6.99
Jupiter Masterdrive (New)	16.99
Kamilhaza (New)	7.99
Keef the Thief	6.99
Kenny Dalglish Soccer Manager	7.99
Kick Off (Special Offer)	5.99
Kick Off + Extra Time (New)	7.99
Kick Off 2	13.99
Kick Off 2 (1 Meg)	16.99
Kick Off 2 The Final Whistle	8.99
Killing Cloud (New)	16.99
Kindwords 2 (Word Processor)	34.99
Last Ninja 2	7.99
Leather Goddesses of Phobos	6.99
Legend of Faerghail	19.99
Leisuresuit Larry 3	29.99
Leisuresuit Larry Triple Pack	49.99
Lemmings	16.99
Little Puff (New)	6.99
Loopz (New)	16.99
Lord of the Rising Sun (Special Offer)	12.99
Lost Patrol	16.99
M1 Tank Platoon	19.99
Manchester Utd	16.99
Manhunter In San Francisco	24.99
Master Blazer	16.99
Mercenary Compendium	9.99
Midnight Resistance	16.99
Midwinter	19.99
Mighty Bombjack	16.99
Moonwalker (New Price)	7.99
Monty Python	13.99
Mr Do Run Run	9.99
M.U.D.S.	16.99
Mig 29	24.99
Multi Player Soccer Manager	16.99
Mystical	16.99
N.A.R.C.	16.99
NAM (New)	19.99
Night Shift	16.99
Ninja Remix	16.99
Nuclear War	17.99
Obliius	24.99
Operation Stealth	16.99
Operation Thunderbolt	16.99
Operation Wolf (New Price)	7.99
Oriental Games (Special Offer)	9.99
Outrun (New Price)	7.99
P.G.A. Tour Golf (New)	16.99
Pang	16.99
Panza Kick Boxing (New)	16.99
Pinball Magic	16.99
Planet Fall	6.99
Player Manager	13.99
Police Quest 2	24.99
Pool of Radiance (1 Meg Only)	19.99
Populous	16.99
Populous New Worlds	6.99
Ports of Call	16.99
Powermonger	19.99
Prince of Persia	16.99
Pro Tennis Tour 2	16.99
Pub Trivia	4.99
R-Type (New Price)	7.99
R.V.F. Honda (Special Offer)	9.99
Rainbow Island	16.99
Red Storm Rising	17.99
Renaissance (Special Offer)	9.99
Rick Dangerous 2	16.99
Road Blasters	7.99
Robocop 2	16.99
Rock Star Ate My Hamster	6.99
Rocket Ranger (New Price)	9.99
Rulf and Ready	6.99
Saint Dragon	16.99
Shadow of the Beast 2	24.99
Shadow Warrior	16.99
Silent Service (Special Offer)	9.99
Silkworm	7.99
Sim City	19.99
Sim City Editor	9.99
Space Quest 3	24.99
Speedball (New Price)	9.99
Speedball 2	16.99
Spindizzy Worlds	16.99
Spy Who Loved Me	13.99
Storm Across Europe	19.99
Strike Force Harrier (New Price)	9.99
Summer Olympiad	4.99
Super Cars + 10 Discs (Spec Off)	12.99
Super Cars 2 (New)	16.99
Super Grid Runner (New Price)	7.99
Super Hang On (New Price)	7.99
Super Monaco Grand Prix (New)	16.99
Super Off Road Racer	16.99
Super Scramble Sim (New Price)	7.99
Supremacy	19.99
Swiv	16.99
T.V. Sports Basketball	19.99
Targhan	4.99
Team Suzuki	16.99
Team Yankee	19.99
Tee Off (New)	8.99
Teenage Mutant Hero Turtles	16.99
Thunderblade	7.99
Torvak the Warrior	16.99
Total Recall	16.99
Tower Fra	16.99
Toyota Celica GT Rally	16.99
Tracksuit Manager '91 (New Price)	7.99
Treble Champions (New Price)	6.99
Trivil Persuit	13.99
Turf Form/System & Pools and Racing Predictor	9.99
Turrican	13.99
Turrican 2	16.99
Typhoon of Steel (1 Meg)	19.99
U.M.S. 2 (1 Meg Only)	19.99
Ultima 5	19.99
Ultimate Golf (Greg Norman)	16.99
Unreal	19.99
Venus Fly Trap	13.99
Voodoo Nightmare	16.99
Wacky Darts	6.99
War Construction Kit (1 Meg)	19.99
Warlock The Avenger	16.99
Warlords	19.99
Wellltis	16.99
White Death	19.99
Wings (1 meg only)	19.99
Wings 1/2 meg only)	16.99
Wishbringer	6.99
Witchball (New Price)	7.99
Wollpack (1 meg)	19.99
World Championship Soccer	16.99
World Class Leaderboard (new Price)	7.99
Yogi And The Greed Monster (New)	6.99
Z-Out	13.99
Zany Golf	6.99
Zork	6.99
Zork 2 (New Price)	9.99

AMIGA COMPILATIONS

POWER UP
Rainbow Islands, Turrican, Chase H.Q., X-Out & Altered Beast
19.99

BIG BOX
Teenage Queen, Captain Blood, Bubble +, Hostages, TinTin On The Moon, Safari Guns, Purple Saturn Day, Krypton Egg, Jumping Jackson & Stir Crazy
19.99

COIN OP HITS 2
Dynasty Wars, Ninja Spirit, Vigilante, Hammerfist & Ghouls and Ghosts
19.99

CLASSIC 4
Invaders, Asteroids, Galaxion & Centipede
6.99

FIST OF FURY
Double Dragon 2, Ninja Warriors, Shinobi & Dynamite Dux
19.99

HIT MACHINE
Super Cars, Skidz, Switchblade & Axels Magic Hammer
16.99

SOCCER MANIA
Football Manager 2, Microprose Soccer, Football Manager World Cup Edition & Gazza's Super Soccer
16.99

POWER PACK
Xenon 2, T.V. Sports Football, Bloodwych & Lombard R.A.C. Rally
16.99

WHEELS OF FIRE
Hard Drivin', Chase H.Q., Turbo Outrun & Powerdrift
19.99

THRILLTIME PLATINUM VOL 2
Buggy Boy, Bombjack, Space Harrier, Live And Let Die, Thundercats, Beyond The Ice Palace & Battleships
16.99

MAGNUM FOUR
Afterburner, Double Dragon, Operation Wolf & Batman The Caped Crusader
19.99

SPORTING WINNERS
Daily Double Horse Racing, Steve Davies Snooker & Brain Clough's Football Fortunes
16.99

THE WINNING TEAM
A.P.B., Klax, Vindicators, Cyberball & Escape Planet Of The Robot Monsters
19.99

FULL BLAST
Ferrari Formula One, Carrier Command, Rick Dangerous, P-47 Thunderbolt, Highway Patrol & Chicago 90
19.99

FINALE
Paperboy, Ghosts and Goblins, Overlander & Space Harrier
16.99

CHALLENGES
Fighter Bomber, Super Ski, Kick Off, Pro Tennis Tour & Stunt Car
19.99

HOLLYWOOD COLLECTION
Robocop, Ghostbusters 2, Batman The Movie & Indiana Jones Last Crusade
19.99

PLATINUM
Strider, Black Tiger, Forgotten Worlds, Ghouls and Ghosts
19.99

SEGA MASTER MIX
Superwonderboy, Dynamite Dux, Crackdown, Turbo Outrun & Enduro Racer
19.99

HINT BOOKS

Bards Tale 1 or 2 or 3	5.00
Buck Rogers	7.99
Champions of Krynn	7.99
Codename Iceman	8.99
Colonels Bequest	8.99
Conquest of Camelot	8.99
Curse of Azure Bonds	7.99
Dragons of Flame	4.00
Heros of the Lance	4.00
Heros Quest	8.99
Hillsfar	7.99
Indiana Jones The Adventure	4.99
Kings Quest 1 or 2 or 3 or 4	8.99
Leisuresuit Larry 1 or 2 or 3	8.99
Manhunter in San Francisco	8.99
Might and Magic 2	5.99
Police Quest 2	8.99
Pool of Radiance	7.99
Secret of Silver Blades	7.99
Space Quest 1 or 2 or 3	8.99
Quest for Clues Hint Book 3	14.99

Hints and tips for 40 titles including:- Codename Iceman, Future Wars, Hound of Shadow, Indiana Jones, Leisuresuit Larry 3, Loom, Manhunter in San Francisco, Police Quest 2, Space Quest 3, Batle Tech, Champions of Krynn etc etc etc.

3.5 inch DOUBLE SIDED, DOUBLE DENSITY WITH LABELS	
1	0.59
10	5.50
25	12.50
40 PIECE 3 1/2 DISC BOX	6.99
80 PIECE 3 1/2 DISC BOX	7.99
MOUSE MATS	2.99
ST & AG EXTENSION LEADS	5.99
AMIGA 1/2 MEG EXPANSION	39.99
AMIGA 1/2 MEG EXPANSION + CLOCK	49.99

ORDER FORM AND INFORMATION

All orders sent FIRST CLASS subject to availability. Just fill in the coupon and send it to: Software City Unit 4, Business Development Centre, 21 Temple Street, Wolverhampton. WV2 4AN

ORDER FORM (BLOCK CAPITALS)

Name .....
Address .....
.....
Postcode..... Tel no.....

Name of Game	Computer	Value
	Postage	
	Total	

POSTAGE RATES: Please add 50p for post and packaging on all orders under £5.00 EEC countries add £1 per item. Non EEC add £2 per item.
PAYING BY CHEQUE - Cheques payable to Software City.
Card Type..... Expiry Date.....
Signature.....
Date.....

EUROPEAN ORDERS
MASTERCARD
EUROCARD ACCEPTED ONE 05/91

VIZ

THE COMPUTER GAME

VIZ: THE COMPUTER GAME
Virgin (Titter!)

PRICE £19.99

OUT NOW

GRAPHICS 77%

SOUND 63%

PLAYABILITY 73%

VALUE 71%

OVERALL 68%

BEFORE OUR STONKING THREESOME can use their weapons to participate in a bit of race sabotage they need to collect a few tokens by taking part in the bonus games. Here, wiggling the joystick galvanises Johnny Fartpants' pump into action and propels our hero magically up the flatulence scale.

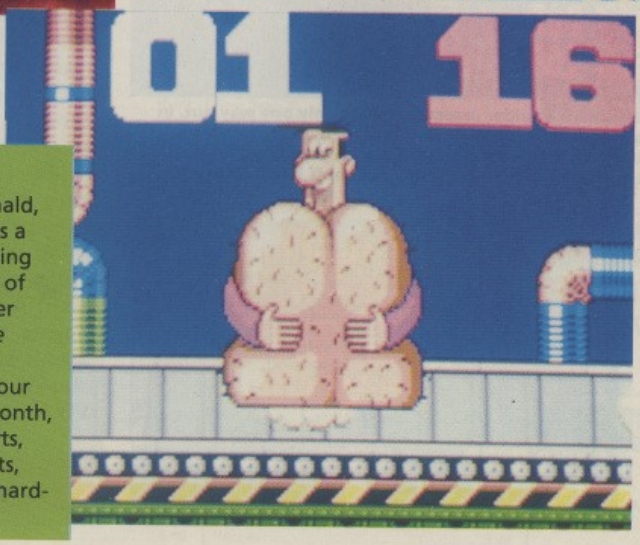
WHEN YOU'RE FEELING tired and depressed it's quite common to get a sudden urge to walk out under a moving car. This is inadvisable, as there's a very good chance that you may end up dead. Instead, why not purchase a square-shaped piece of plastic and shove it into one of those useful receptacles known in the trade as a disk drive. It sometimes works.

And now there's a piece of plastic like no other. Yes folks, *Viz*, home of Finbarr Saunders (source of endless double entendres), and the world's greatest receptacle for bad jokes, has produced its very own computer game.

Top of the bill are Johnny Fartpants, Buster Gonad and Biffa Bacon, taking part in a race, staged in the sunny town of Fulchester, hosted by the world-famous Roger Mellie and FTV. The course covers five sections, each littered with obstacles. Fail and you're forced to retire with egg on your face: win and you don't even get a prize. But then that's life all over - crap.

AND THEY'RE OFF. Roger Mellie does the preliminary honours and provides characteristically succinct commentary throughout. As for the other Roger, he's Irrelevant.

DOWNING PINTS is the ideal way to get power to those parts intelligent conversation just can't reach. Beer transforms itself into tokens according to how much liquid Biffa quaffs.



FOR BUSTER, collecting tokens doesn't come easily. Having shipped his gonads to a pancake factory he's forced to exploit their bulbous bulk to forcefully flatten the dough. Unless it's completely flat it doesn't count. His other bonus level is equally painful: it involves bouncing as high as possibly on those unfeasibly giant testes.

VIZ - THE COMIC

Dreamed up by Chris and Simon Donald, Graham Dury and Simon Thorp, *Viz* is a study in how to get rich quick by telling 'botty' jokes. From a début print run of 150 copies sales have rocketed to over 1,000,000. These days it vies with *The Simpsons* as a source of associated merchandise. Not only can you get your mitts on a copy of the comic every month, there are also books (The Spunky Parts, The Dog's Bollocks), calendars, T-shirts, alarm clocks and hats to spend your hard-earned readies on and snigger over.

THE COMPETITORS

BUSTER GONAD
Despite a disability which would bring tears to other people's eyes, Buster Gonad remains cheerful about the fate which has befallen his unfeasibly large testicles. It's their all-purpose versatility that makes them as useful as a third arm.

BIFFA BACON
Biffa doesn't need words - he uses his fists. Buy him a pint and he'll be your friend for life. Spill it, and you get a free trip to hospital.

JOHNNY FARTPANTS
Distinguished from an early age by a fetish for pickled eggs, Johnny's brown and dirty underpants are the product of a lifetime's windy bottom - a talent which has made him famous.

THIS IS RODNEY RIX. He throws bricks. Keep in your lane and you'll avoid him; get hit and the shame is enough to make you lose a life.

DRAWING FROM HIS BOTTOMLESS RESERVE of charm, Parkie attempts to nab you the second you set foot in the park. Use your devastating secret weapon or just leg it pretty sharpish.

WHEN JOHNNY FARTPANTS is under pressure there's only one way out. In average difficulties his weapon number one, a propellant bottom burp, works wonders but when things look really dicey only Johnny's Super Power - a massive curry-induced Mega Pump - can chuff him into the lead.

THANKS TO BUSTER'S wheelbarrow, his unfeasible physique is transformed into a model of streamlined efficiency. Gonad is also entitled to use Plum Power - a personalised nut bounce.

COMMENT

You get a lot with a copy of *Viz*: jokes, fat slags, a bagful of tips and plenty of change out of a fiver. The computer game isn't such good value for money. £19.99 buys you a standard obstacle course, a few bonus screens and a handful of jokes. The unusual bonus games are good fun and the graphics accurately capture the characteristics of the comic, but underneath the glossy exterior there lurks nothing more elaborate than a basic chase game. Hotfooting it around the Fulchester sights is fun for a while but for non-fans there just isn't enough substance to justify the price. Viz fanatics could spend a couple of hours or so chortling at Roger Mellie's subtle asides (though after the third reading they do tend to grate a bit) but even they might be disappointed at the relatively small role played by most of Fulchester's stalwarts: where's Billy The Fish? As a game all this is most likely to appeal to exactly the sort of people who aren't allowed to buy it - kids. Adults should consider sticking their nose in a Viz book instead.

Kati Hamza

PREMIER MAIL ORDER

*Titles marked * are not yet available and will be sent on day of release.*
Please send cheque/PO/Access/Visa No. and expiry date to :

Dept THAM/05, Trybridge Ltd., 8 Buckwins Sq., Burnt Mills, Basildon, Essex. SS13 1BJ.

Please state make and model of computer when ordering. P&P inc. UK on orders over £5.00. Less than £5.00 and Europe add £1.00 per item. Elsewhere please add £2.00 per item for Airmail. These offers are available Mail order only..Telephone orders: mon-Fri 9am-7pm. Saturday 10am-4pm. Fax orders : 0268 590076. Tel Orders : 0268 - 590766

GAME	AMIGA
1/2 Meg Upgrade	29.99
1/2 Meg Upgrade with clock	32.99
3D Construction Kit*	26.99
4D Driving*	16.99
ADS	16.99
Assault on Alcatraz *	16.99
688 Attack Sub	16.99
AMOS	29.99
Arkaniod 2	5.99
Armour - Geddon *	24.99
Awesome	24.99
B.A.T.	19.99
Batman the Caped Crusader	5.99
Back to the Future 2	16.99
Back to the Future 3 *	16.99
Bards Tale 2	5.99
Bards Tale 3	16.99
Battle Command	16.99
Battle of Britain	19.99
Battle Chess 2*	16.99
Betrayal	19.99
Beastbusters*	16.99
Billy the Kid *	16.99
Big Game Fishing *	16.99
Birds Of Pray*	26.99
Blade Warrior *	16.99
Blue Max	19.99
BRAT *	16.99
4D Boxing *	16.99
Budokan	7.99
Buck Rogers (1 Meg)	19.99
Carrier Command	9.99
Cavadar	16.99
Cadaver Data Disc*	9.99
Captive	16.99
Centurion	19.99
Chaos Strikes Back	16.99
Chase HQ 2	16.99
Champions of Krynn (1Meg)	21.99
Chuck Yeager	16.99
Chuck Rock *	16.99
Codename Iceman (1Mg)	26.99
Colonels Bequest (1Mg)	26.99
Continental Circus	5.99
Commando War *	16.99
Corporation	16.99
Corporation Data Disc	9.99
Creatures*	16.99
Cricket Captain	16.99
Crime Wave *	16.99
Cruise for a Corpse *	16.99
Curse of Azure Bonds (1 Meg)	19.99
Cybercon 3*	16.99
Das Boot	19.99
Defender of the Crown	7.99
Dick Tracy	16.99
Disney Animation	79.99
Double Dragon	5.99
Dragons Breath	12.99
Dragons Lair 2	26.99
Dragon Strike *	19.99
Dragon Wars	16.99
Dragons Lair (1Meg)	26.99
Dragons Lair Time Warp	26.99
Duck Tales	16.99
Dungeon Master	16.99
Duster *	16.99
Dynamite Debugger *	16.99
E-Swat	16.99
Epic *	19.99
ELF *	16.99
Emlyn Hughes	13.99
Escape from Colditz	19.99
Eye of the Beholder (1 meg) *	19.99
Excalbur*	16.99
F15 Strike Eagle 2 *	22.99
F16 Combat Pilot	16.99
F19 Stealth Fighter	19.99
F29 Retaliator	16.99
Falcon	14.99
Falcon Mission Disk	10.99
Falcon Mission Disk 2	10.99
Fantasy World Dizzy	5.99
Fireball *	16.99
First Samuari*	16.99
Flight of the Intruder *	19.99
Flood	7.99
Football Man World Cup	9.99
Football Director 2	13.99
Ford 98 Rally *	16.99
Fun School 3 5-7	16.99
Fun School 3 over 7	16.99

GAME	AMIGA
Fun School 3 under 5	16.99
Fun School 2 (6-8)	13.99
Fun School 2 (over 8)	13.99
Fun School 2 (under 6)	13.99
Future Wars	16.99
Gazza 2	16.99
Gremilns 2	16.99
Gods*	16.99
Golden Axe	16.99
Gunship	14.99
Gunboat *	16.99
Gaunlet 3*	16.99
Hard Driven	9.99
Hard Drivin' 2	16.99
Harpoon (1Meg)	19.99
Herosquest*	19.99
Hitchikers Guide	7.99
Hollywood Collection	19.99
Horror Zombies *	16.99
Hunter *	16.99
Hydra *	16.99
IK+ *	5.99
Imperium	16.99
Indianapolis 500	16.99
Int Soccer Challenge	16.99
It came from the Desert Data	9.99
It came from the Desert	14.99
Jack Nichlaus Extra courses	9.99
Jack Nichlaus Golf	16.99
Jack Nicklaus unlimited Golf (1 Meg)	19.99
Judge Dredd	13.99
Kick Off 2	12.99
Kick Off 2 (1 Meg)	14.99
Killing Cloud*	16.99
Kings Quest 4 (1 Meg)	26.99
K.O.2 Final Whistle	8.99
K.O.2 Giants of Europe *	7.99
K.O.2 Return of Europe *	7.99
K.O.2 Winning Tactics *	5.99
K.O.2 Super League*	9.99
Knights of the Sky *	19.99
Kristal	9.99
Last Ninja 2	5.99
Last Ninja 3*	16.99
Leather Goddess	7.99
Lemmings	16.99
Leisure Suit Larry 2	26.99
Leisure Suit Larry 3	26.99
Life and Death *	19.99
Line of Fire	16.99
Loom	19.99
Lords of Chaos *	16.99
Lord of the Rings*	16.99
Lost Patrol	16.99
Lucasfilm Double Pack	19.99
Magnetic Scrolls Collection*	19.99
Magnum 4	19.99
Mean Streets	16.99
Mercs *	16.99
Mega Traveller 1 *	19.99
Mega Lo Mania *	16.99
Mig 29	22.99
Manchester United	16.99
Masterblaster*	16.99
Monty Python	13.99
M1 Tank Platoon	19.99
Mid Winter	19.99
Mldwinter 2*	19.99
Midnight Resistance	16.99
M.U.D.S.	16.99
Murder	16.99
NARC	16.99
NAM*	19.99
Navy Seals *	16.99
Nightbreed RPG	16.99
Ninja Remnix	16.99
Nightshift	16.99
Nitro	16.99
Obitus	24.99
Operation Stealth	19.99
Oriental Games	16.99
Operation Thunderbolt	16.99
Operation Wolf	5.99
Off Raod Racer	16.99
PGA Tour Golf	16.99
Pang	16.99
Pirates	15.99
Player Manager	12.99
Platinum	16.99
Platoon	5.99
Ploting	16.99
Power Up *	19.99

GAME	AMIGA
Projectyle	7.99
Police Quest 2 (1 Meg)	26.99
Pool of Radiance	19.99
Populous	16.99
Populous Promised Land	7.99
Powerpack	14.99
Powermonger	19.99
Powermonger Data Disc 1*	9.99
Predator 2 *	16.99
Pro Tennis Tour 2	16.99
Puzznic	16.99
Quattro Adventure	9.99
Quattro Sports	9.99
R Type	5.99
Rambo 3	5.99
Rainbow Islands	16.99
Railroad Tycoon	22.99
Red Storm Rising	15.99
Reach for the Skies *	16.99
Rogue Trooper	19.99
Robozone *	16.99
Rocket Ranger	7.99
Rotator *	16.99
Rick Dangerous 2	16.99
Rick Dangerous	7.99
Rise Of The Dragon*	26.99
Rocky Horror Show *	16.99
Robocop 2	16.99
Search for the King *	16.99
Secrets of the Luftwaffe *	19.99
Secret of Monkey Island *	19.99
Shadow Warriors	16.99
Shadow of the Beast	16.99
Shadow of the Beast 2	26.99
Shadow Sorceror *	19.99
Shadow Dancer*	16.99
Skull and Crossbones *	16.99
Silkworm	5.99
Sim City	19.99
Silent Service	9.99
Ski or Die	16.99
Sly Spy	16.99
Speedball	7.99
Space Ace	26.99
Spiderman	16.99
Space Quest 3	26.99
Speedball 2	16.99
Stratego *	16.99
Strider 2	16.99
Star Flight	16.99
Star Flight Hint Bk	5.99
Steven Hendry *	16.99
Stun Runner	13.99
Subbuteo	16.99
Supremacy	19.99
Super Hang On	5.99
Super Monaco GP	16.99
Shuttle*	19.99
Switchblade 2*	16.99
Swiv	16.99
Team Suzuki	16.99
Team Yankee	19.99
Teenage Mutant Turtles	16.99
Test Drive 2	16.99
Test Drive 3*	16.99
T't Drive 2 California Chall	9.99
Test Drive 2 Muscle Cars	9.99
The Immortal (1 meg)	16.99
Tip Off*	14.99
Track Suit Manager 2 *	16.99
Treasure Trap	6.99
Tournament Golf	16.99
Toki *	16.99
Toyota Celica	16.99
Total Recall	16.99
Turbo Challenge	16.99
Turrican	7.99
Turrican 2	16.99
TV Sports Baseball *	19.99
TV Sports Basketball	14.99
TV Sports Football	12.99
UMS 2	19.99
Viz*	16.99
Walker *	16.99
Warlords	19.99
Wolf Pack (1 Meg)	19.99
Wonderland *	19.99
Wrath of the Demon	19.99
Wings	19.99
Wizball	5.99
Wizkid *	13.99
Xenon 2 Megablast	16.99

JOYSTICKS

Quickjoy Jetfighter	10.99
Quickjoy Megaboard	19.99
Cheetah 125+	6.99
Comp Pro Extra	14.99
Quickjoy Turbo 2	8.99
Qucikshot 3 Turbo (Sega Comp)	9.99
Sega Control Stick	13.99

BLANK DISKS

Top Quality Unbranded Disks

10 x 3.5" DSDD	5.99
20 x 3.5" DSDD	10.99
50 x 3.5" DSDD	23.99
100 x 3.5" DSDD	44.99

Branded Disks

3.5" DSDD	1.25	Each
5.25" DSDD	0.75	Each

MIDWINTER 2
ONLY £19.99

E.A.SPECIAL OFFERS

ONLY £7.99 EACH

POWERDROME
BARDSTALE 2
ZANY GOLF
KEEF THE THIEF
INTERCEPTOR
HOUNDS OF THE SHADOW
SWORDS OF TWILIGHT

SPECIAL OFFER

Turrican
Now Only £7.99

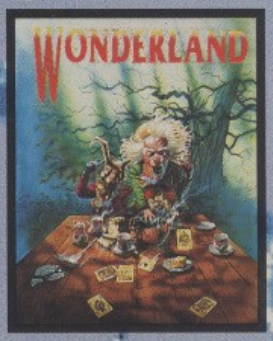
SPECIAL OFFER

Hammerfist
NOW ONLY £7.99

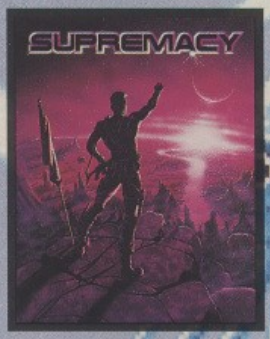
SPECIAL OFFER

Steve Davis Snooker
Now Only
£7.99

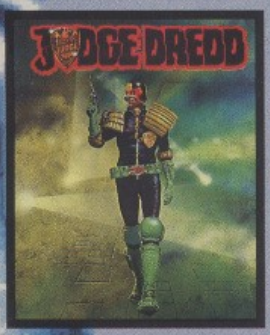
REASONS TO BE C



WONDERLAND
Puzzles, conundrums, potions, caterpillars, mushrooms and very Mad Hatters for your IBM PC, Amiga, Atari ST and Archimedes



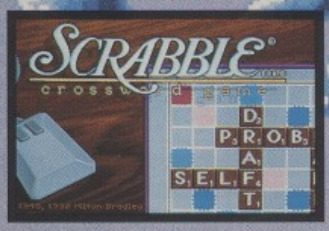
SUPREMACY
The last word in space strategy for your IBM PC, Amiga, Atari ST and C64



JUDGE DREDD
"Nobody's an innocent citizen – we're just here to determine the level of guilt." Amstrad, Spectrum, Amiga, Atari & C64

COMING SOON!

FISTS OF FURY
Battle your way through four of the biggest selling games of all time – Double Dragon II, Shinobi, Ninja Warriors and Dynamite Dux. Amiga, Atari ST, C64, Spectrum and Amstrad



"NEW" DE LUXE SCRABBLE
The NEW deluxe computer edition of the ultimate in computer word games. Outshines *all* previous versions. IBM PC

Virgin
Leisure Genius

E CHEERFUL (1-10)

THE MAGNETIC SCROLLS COLLECTION (VOLUME ONE)
Corruption, Guild of Thieves and Fish! – three classic adventures enhanced to run under Wonderland's new Magnetic Windows system. IBM PC, Amiga, Atari ST and Archimedes

SHUTTLE
The most authentic space simulation ever conceived for your IBM PC, Amiga and Atari

GOLDEN AXE
The smash hit coin-op hacks and slashes its way onto the small screen for your Amstrad, Spectrum, C64, Amiga and Atari ST

EXCALIBUR
A rich blend of Fighting, Fantasy and Strategy set in Arthurian Britain. For your IBM PC, Amiga and Atari ST

VIZ
Includes all the faves from your favourite mag. Roger Mellie, Buster Gonad, The Fat Slags, Finbar Saunders, fnaar fnaar. Amstrad, Spectrum, C64, Amiga and Atari ST

Virgin GAMES

16 Portland Road, London W11 4LA
071 727 8070 (Sales) 071 243 1980

ISSUE 6 MARCH/APRIL 1991 £1.95

PC Leisure

The complete guide to PC entertainment

SKULL DIGGERY!

Cranial capers in Life and Death II: THE BRAIN

Superb WWI simulation strategy in

RED BARON

GREAT GAMES GUIDE
33 red hot titles you MUST have

Plus!

Also in this feature-packed issue...

- 3D Construction Kit surveyed
- PC virtual reality system
- DTP for fun
- PC Shareware reviews

WIN FREE SOFTWARE FOR A YEAR!

OUT NOW

FREE LE… DISK?
Ask th… …nt!

SECRET WEAPONS OF THE LUFTWAFFE
Goering's back...and this time he's MAD!

PLUS ...Gunship 2000 preview, Lord of the Rings, Rise of the Dragon, Moonbase... and much, much more

03
9 770959 024013

DEMONIAK

WHAT DOES A DEMON DO when it's bored? Actually, scrub that question, as Demoniak is more than just a demon, it's pure evil, formed from everybody's dark side. Anyhow, this awful individual thinks that it's found a solution to its eternal boredom.

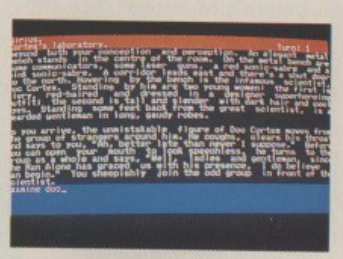
In its own universe Demoniak is the master of all that it surveys - and that's quite a bit - but it still wants more, and our universe seems likely to become the next target.

Fortunately, Doc Cortex, the most intelligent human being ever, has detected Demoniak's presence and has called together four of Earth's most powerful superheroes to stop him.

Sirius - Man of Action - is a half-human, half-alien hybrid endowed with immense strength. Kyra Brand (a.k.a. Flame) is a Pyrokine, able to convert her body into a mass of flame at any given time. Madlok is the Earth's current Sorcerer Supreme, while Sondra Houdini is a Marxist/Feminist psychic.

Together this motley crew should be able to collect the necessary components to construct a device capable of sealing the entrance which Demoniak hopes to use to gain access to our universe.

Unfortunately, for security reasons, Doc Cortex won't say what those components are. As the companions blast off to the icy planet of Freezyassov, Demoniak sits quietly, patiently waiting, timing his strike, collecting his thoughts, chewing his nails, watching the grass grow...



IN GENERAL, THE LAYOUT is pretty basic. The red bar at the top tells you the current location, which character you're currently in control of and how many turns you've taken. The blue bar at the bottom is where you input text and the central window is where the story is told.

EVERY SO OFTEN you'll be asked to press a key for a picture. These serve to either break up the text or to provide a more graphic description of an important element.

SONDRA'S MIND-READING ABILITY is displayed by adding another window to the screen, showing exactly what the subject is up to.

COMMENT

FOR A TEXT ADVENTURE to make the grade these days, it has to be something pretty special indeed - and *Demoniak* is certainly that. In a similar fashion to most Multi-User Games (or MUGs), all of the characters (bar three) are controlled by yourself. That's not to say that they don't have any intelligence of their own though, in fact quite the reverse is the case. For example, taking control of a prison guard you could decide to turn rebel and start blasting away at the other guards. They in turn start to retaliate and, in the confusion, you swap control to another guard. Using this character, you unlock the cell of a prisoner whom you want to take control of next. Then, walking out of the cell, you stand back and watch as the other guards pile into each other. Importantly for any text adventure, the parser (the part of the program which interprets your input) is quite competent, taking commands such as 'take all the red things from the bench' in its stride. Of course, the real beauty of Demoniak is the text. The author, Alan Grant, is highly regarded in the world of comics and his humour and style is clearly evident here. Demoniak's biggest problem is simply that it's a text adventure. Unless you're prepared to sit down and type, it's not going to be your cup of tea. Which is a shame because it really is a fine cup of Earl Grey.

Paul Presley

DEMONIAK
Palace

PRICE
£29.99

OUT
NOW

GRAPHICS
85%

SOUND
80%

PLAYABILITY
90%

VALUE
84%

OVERALL
90%

ALAN GRANT'S LIST of credits makes impressive reading for any comics fan. He's probably best known for his work on *2000AD*, which included many Judge Dredd stories (either written alone, or in collaboration with Dredd's creator, John Wagner) alongside Strontium Dog, Ace Trucking Company, Robohunter and Judge Anderson among others. Grant has also written for American comics giants D.C. and Marvel, contributing stories for such infamous characters as Batman, RoboCop and The Punisher. Future attractions will include one of the comic world's unlikeliest team-ups, when Batman and Judge Dredd join together in a collaboration between D.C. and British publisher Fleetway. Watch out for more news of this and other Alan Grant projects in a future issue.

CRYSTALS OF ARBOREA

CRYSTALS OF ARBOREA
Silmarils

PRICE
£24.99

OUT
NOW

GRAPHICS
88%

SOUND
86%

PLAYABILITY
84%

VALUE
81%

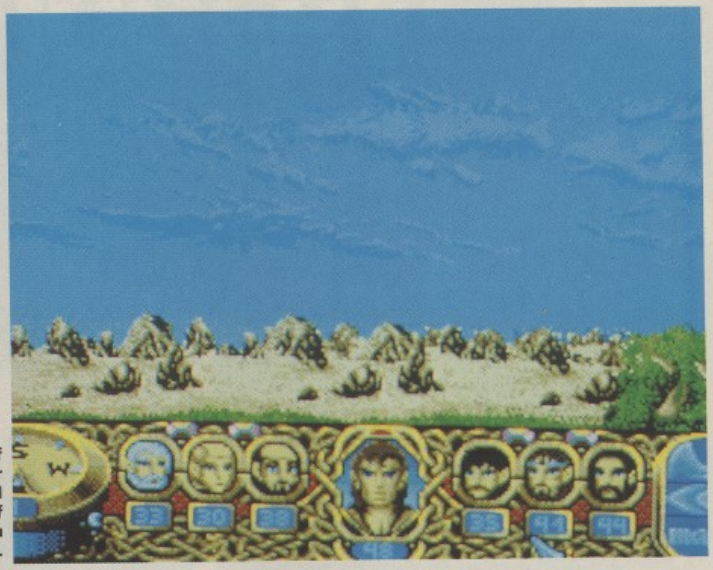
OVERALL
86%

AS JAREL, THE PRINCE OF SHAM-NIRS, you and your six companions have to explore Arborea, find the four crystals that symbolise the four elements from which the Crystal world has been created : Earth, Sky, Water, and Fire and return them to their respective towers.

The scenario for this impressive French 3D role-playing game reads, typically, like the back-cover blurb for most pulp fantasy. Gods created the world, to be the home of mortal creatures. Only three different races lived there for many years : Orcs, tireless workers; Sham-nirs, Artisan Elves; and Black Elves, the rulers of the Crystal world.

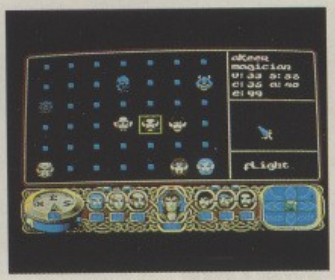
Then, one day, Morgoth, a fallen angel, cursed the Gods who had banished him from heaven and swore revenge. He swept across the Crystal world bringing discord and violence. He corrupted the Orcs and Black Elves, turning them against the Sham–nirs.

The Gods were dismayed at the anarchy everywhere, so they drowned the world in their fury, leaving only Arborea as the last resting place for the crystals above the sea.



ONCE IN 3D MODE you see out of Jarel's eyes, while the rest of your group head for their initial destination from the 2D map: If they come across any enemies you will either have to fight or flee.

CREATING CHARACTERS is easy. Just pick the appropriate profession, allocate points to the list of statistics and you're away. There are also options to load existing characters, check maps, or review instructions.



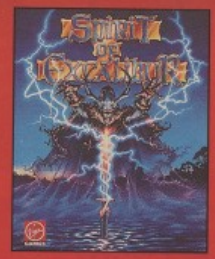
IN COMBAT, the action switches to a bird's-eye view. It's simple to manoeuvre the party for attack, but you'll need plenty of power as well as wits if you are to avoid becoming so much monster fodder.

AS YOU CAN EITHER MOVE the whole group together or as individuals, it's possible to switch between your six companions to check on their locations - . However, trying to keep track of the group whilst in 3D Mode is difficult without making frequent references to the map.

COMMENT

FROM THE MOMENT that the intro–sequence begins (showing the four crystals flying through the air and landing in Arborea) you can tell that this one has been polished 'til it shines. Then, once into the game proper, the player finds a simple and friendly front-end that doesn't get in the way of the atmosphere. The characters and other creatures are well-drawn and accompanied by some superb, realistic looking, background artwork. Simarils hasn't let itself down on the sound front either: both the intro and game–over music have a very mediaeval feel which complements the action perfectly. The sound effects are equally impressive, with suitable grunts during combat, and even the odd bird tweet! If you're prepared to spend some time establishing exactly how to begin (there are moments when the correct action is far from obvious), you may find *Crystals Of Arborea* rich and rewarding.

Julian Watsham



A blend of fantasy role-playing, adventure and combat simulation set in a richly detailed world of mountains and rivers, villages and cities, castles and ruins of Medieval England.

Knights and lords, wizards and clerics of the court of Camelot are yours to befriend and command. Interact with peasants, warriors, maidens, nobles and bandits improving their abilities and skills as you go.

features:

* More than 2.5 megabytes of dazzling graphics
* Powerfully orchestrated sound-track
* 16 screen scrolling map of Arthurian Britain
* Zoom from map level down to individual towns and cities
* Hundreds of hours of play-time
* PC version supports Roland MT-32, Covox, Adlib and CMS sound boards

A KNIGHT

TO REMEMBER

AVAILABLE NOW ON PC & AMIGA

Available on:

IBM PC (VGA, MCGA, Tandy, EGA)	**£34.99**
Amiga (1 megabyte only)	**£29.99**
Atari ST (1 megabyte only)	**£29.99**

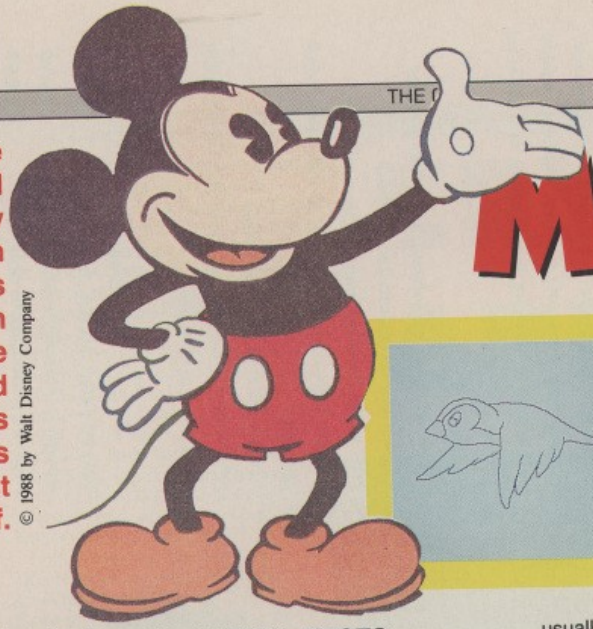
IBM PC VGA SCREEN SHOTS SHOWN

Virgin GAMES CONCEPTS

IMMACULATE

MAKING

Laurence Scotford gets arty with Disney's animation software and discovers that it's not just kids' stuff.



© 1988 by Walt Disney Company

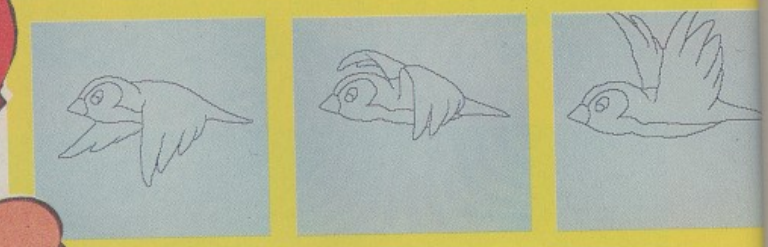


Figure 1: The extreme frames of the birds movement are drawn first.

Ever since its European release in the mid-Eighties, the Amiga's potential for sophisticated audio-visual presentations has been realised to a greater extent with every passing year. The Amiga 2000 and 3000 have become the darlings of the audio-visual industry, being used for everything from slide preparation to animation control.

But it's not just a power thing, the low-end Amiga 500 has also has its fair share of art and music packages, one of the most popular being Electronic Arts' *Deluxe Paint* program. This has become a firm favourite with professional graphics designers: not only do its wide range of powerful features make it ideal for producing background artwork, it also boasts a sophisticated animation facility which is useful for creating and testing sprites.

If, however, you've been interested in using your Amiga as an alternative to traditional pencil and paper animation a la Walt Disney or Warner Brothers, up until now there has been nothing you could turn to, short of upgrading to an Amiga 2000 and investing in some prohibitively expensive hard and software. All that has changed with appearance of *The Animation Studio* from Disney, the first full-featured animation package for the Amiga 500.

ROUGHS AND STORYBOARD

The key to successful animation is careful planning. Once an idea for a cartoon has been conceived, the next step is to produce a storyboard. The storyboard is a sequence of casual sketches, roughs, which show the key events in the animation you are planning. Ideally, anyone should be able to establish the plot of the cartoon just by looking at the storyboard.

PENCIL TESTS

Having produced an outline for your animation, the next step is to produce a series of 'pencil tests'. These show rough outlines of all of the animated parts of a cartoon (that is, everything bar the static background). The best approach to use is that used by professional animation studios.

Firstly, only the key points of the animation are drawn. These are usually extremes of movement. For instance, if you're animating a flying bird you will begin by drawing the three frames showing the wings completely lifted, completely lowered, and half way between the two (figure 1).

Next comes a process known as 'in-betweening', in which all of the intervening frames are drawn. In a professional animation studio, the chief animators will draw only the key frames while apprentice artists

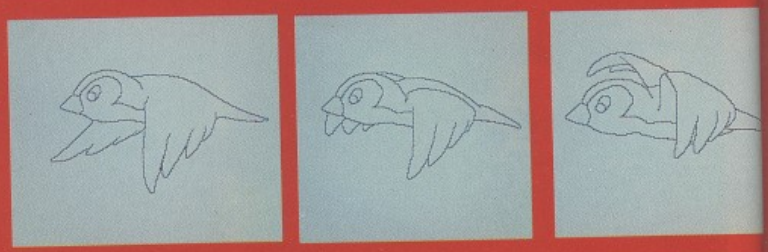


Figure 2: In-Betweening is the process in which the intervening frames are added.

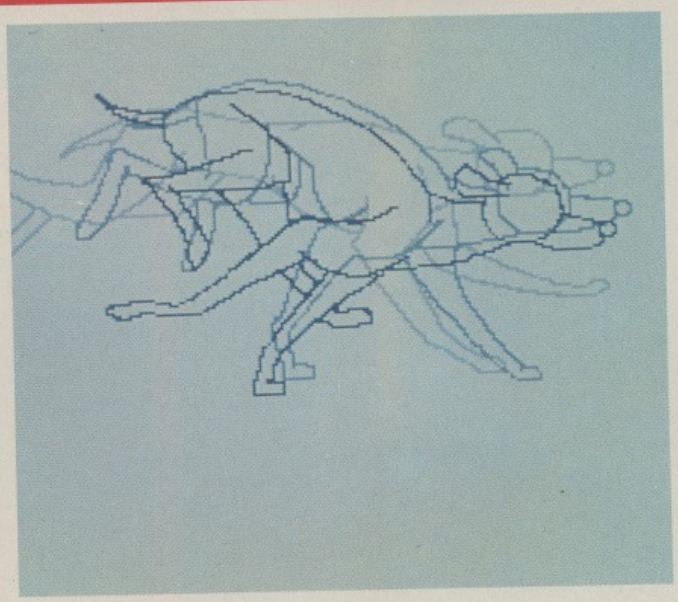


Figure 3: The Animation Studio's 'Onion Skin' technology allows you to reference the previous three frames while drawing the current one.

THE MICKEY

(would you believe, 'in-betweeners'?) draw the remaining frames (figure 2).

The pencil tests essentially work like most powerful Amiga art packages. You can draw freehand, or create circles, ellipses, squares and rectangles, either filled or unfilled. You can draw straight lines and arcs easily, fill areas, add text in a variety of fonts, and create your own brushes. There's also a useful 'magnify and zoom' mode for more detailed work, and it is a simple task to flip, rotate, and scale images.

Where The Animation Studio begins to differ though is in the use of Onion Skins. Each frame of the animation is drawn on a 'cel' – in traditional animation this is a drawing on a piece of acetate. Once a cel has been completed, the next one is overlaid without obscuring the artwork beneath. In this way it's possible to draw the next frame while using the previous one for reference. The Animation Studio reproduces this effect by showing the previous frame as a grey outline behind the current cel. The last three cels are shown in increasingly softer outlines (figure 3).

Once a Cel sequence has been created you can test it by simply selecting the 'camera' function. By default, animations run at 24 frames per second (this is the speed at which a normal film runs, although many animations are made to run at half this speed by shooting each frame twice), but you can alter the frame rate if you wish – a useful facility if you wish to test sequences.

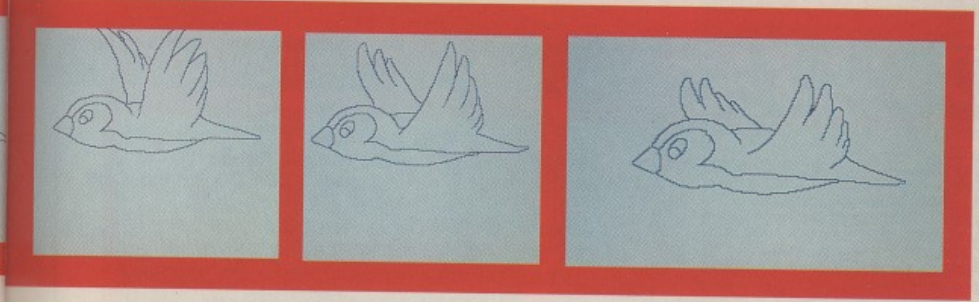
The next step is to test your animation thoroughly. You should watch it several times, keeping an eye out for any unnatural jumps in the action, or areas in which the movement could be made smoother. The Animation Studio makes it easy to alter individual cels or add, delete and swap them.

Once you're happy with your rough animation, it's time to get more organised and write up your 'exposure sheet' (not as offensive as it sounds). The exposure sheet is a detailed plan of action that shows how the cels are to be ordered and how the animation is timed and where sound is used (figure 4). The Animation Studio offers some very sophisticated functions for use in creating an exposure sheet, including a fast search facility and extensive cut and paste options. Sound effects and music are stored in the '.SMUS' format, which is compatible with most Amiga sound and music packages.

So far our animation has only been a series of monochrome line drawings, but now we can bring it to life with the addition of colour. This is done with the 'ink and paint' program. The tools in this section allow you to touch up your pencil test artwork, and add colour and shading. Colour palettes of up to 32 hues can be set up from a range of 4,096 colours, while artwork can be overscanned to fill the entire screen. In addition, extra colours can be created by using a process known as 'dithering', in which two different colours are mixed to create a third (figure 5).

One of the most important elements of the ink and paint program is the 'frisket'. This device allows you to select masking colours so that your animations appear correctly against the background. Without this, parts of the background will show through your animation incorrectly (figures 6a and 6b show the use of background artwork with and without a correct friskit).

The background artwork for animations can be any '.IFF' file, so it can be created with most decent Amiga art packages such as *DPaint III*, and then added to the foreground art via the ink and paint program.



Spec: Runs on any Amiga, but a minimum of One Megabyte of RAM is recommended.
Price: £99.99
From: Entertainment International
Call: (0268) 541126

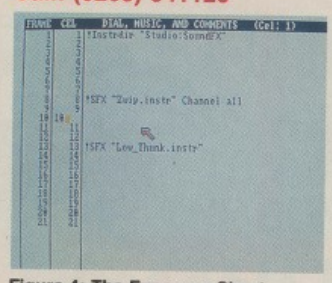


Figure 4: The Exposure Sheet controls the timing of the animation and coordinates sound and images.

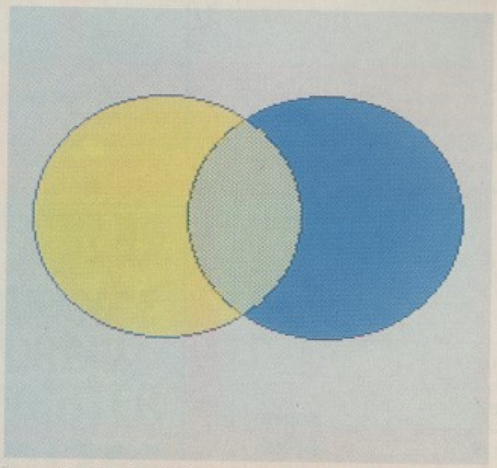
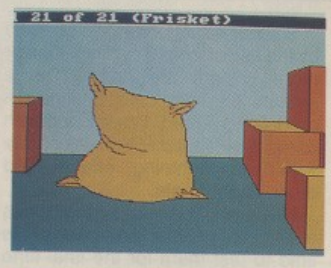


Figure 5: Dithering is the process used to mix two colours to obtain a third. It can be seen here in the two circles. The dithered colour is in the overlapping portion.



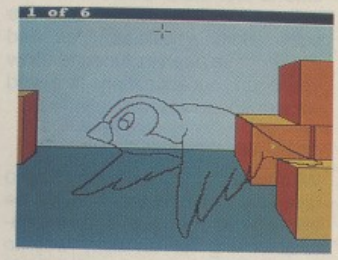


Figure 6: The frisket is used to mask certain colours so that the animations always appear in front of the background, as in picture A. Picture B shows the disastrous effects that results if the Frisket is incorrectly used.

Special effects can be achieved by the use of 'colour cycling'. One or more colours are defined as a sequence of hues which change at a predefined speed. When used with care, this feature can generate waterfalls, lightning effects and other visual treats.

Having added your backgrounds and coloured your animations, it's time to test them for the final time before committing them to disk. The public domain utilities *Flick* and *Flicker* have been included to allow you to run your animations (with and without sound respectively).

THE VERDICT

Without doubt The Animation Studio is a very powerful tool that will be appreciated by both amateur animators looking for an easy way to practice their art and professional animators dabbling in computer animation for the first time.

However, the price is going to be prohibitive to many, especially taking into consideration the necessity of owning a decent paint program to generate background art and a good music program to create scores and sound effects.

This program is ideal for creating animations for demos and game intros, but if you're really serious, you'll probably want to have some sort of video set-up so that your masterpieces can be transferred to video tape when they are complete.

The package has been thoughtfully designed and is easy to use, especially if you take the time to work through the two manuals. There are some nice touches, such as the way all of the programs can be used together as a suite or loaded separately if you are running short of memory. Each program is also fairly foolproof, prompting you, for instance, at points when you would be advised to save your work.

In addition to the sample animations, backgrounds, and sound effects included on the program disk, The Animation Studio comes supplied with a Morgue disk containing classic Disney animations which demonstrate essential animation techniques and a demo disk with a Donald Duck scene created by a Disney animator. The Disney animations can be loaded and manipulated but they have been 'fixed' to prevent the modified files from being saved or used in your own animations.

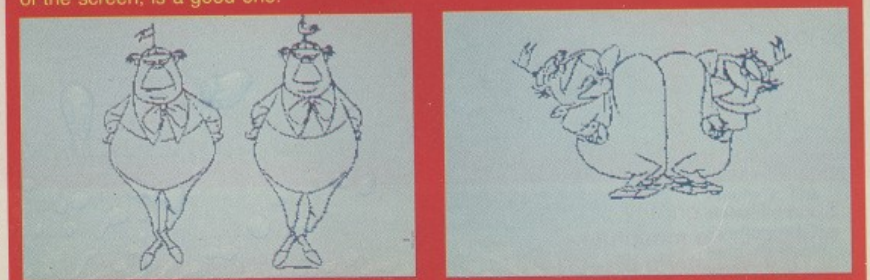
If you don't intend having a serious crack at computer animation, then The Animation Studio is probably too expensive to bother with. If, however, you're looking for a solid introduction to animation with a view to producing your own cartoons, then it can't be too highly recommended.

THE ANIMATOR'S ART

The animators at studios such as Disney and Warner Brothers use tried and trusted techniques which, with a little practice, can be easily applied by anyone with a smattering of artistic skill and creative flair. Here are the more basic ones as demonstrated by Disney's own characters.

Arc of Motion: By using very circular motions (as seen in *Cinderella* when the Fairy Godmother waves her wand) characters are made to flow and are given a lifelike quality. Straight lines should be avoided wherever possible in animations.

Path of Action: The path which an animated character takes as it crosses a background can make the difference between a lively cartoon and a dull one. Try not to have characters walking across screen from left to right or vice versa (this only makes them look two dimensional). Instead, make use of depth by moving them into and out of the screen and using more convoluted paths. Disney's example, in which Goofy appears to zoom out of the screen, is a good one.



Squash and Stretch: Characters lose their rigidity if you accentuate the reactions of parts of the body to certain movements. Something as simple as a bouncing ball, can be given life just by compressing it as it bounces and stretching it as it reaches the top of its bounce. In *Alice in Wonderland*, Tweedledum and Tweedledee are grotesquely squashed and stretched as they move, but as well as making them comic they also appear more real.

Anticipation: This is one of the most important aspects of a good animation. If you lead characters directly into an action it is easily missed and consequently far less effective. This is solved by making characters anticipate a major action. Make them lean back before running, wind up a fist before hitting something, or compress before jumping into the air. The latter is suitably demonstrated by Disney's Donald Duck as he squashes himself towards the table before jumping.

DIAL-A-CHEAT-LINE

for cheats, tips, pokes and secrets on all computer and console games, ring now on

0898 10 1234

Messages updated weekly

Live computer helpline:

0898 338 933

7 days a week 12 noon to midnight

PRICES FOR BEST CHEATS, TIPS, ETC.
Send to: PO Box 54, Southwest Manchester M15 4LY
Proprietor: Jacqueline Wright.

Please ask permission of the person who pays the bill, calls charged at 34p per min 'Cheap Rate', 45p per min at all other times.

ATARI ST/STE – AMIGA

Games for **HIRE** or **PURCHASE**
TRY before you **BUY**
At least 15% off all software Guaranteed Originals
We have the **LOWEST Membership & Review Fees** of any ST & Amiga Club
Try our **Public Domain at LOW LOW prices**
Swop your originals in our SWOPSHOP
SPECIAL MAY OFFERS FOR NEW MEMBERS
New releases added **WEEKLY**
Monthly Newsletter plus lots of **Membership Interaction**

Please enclose **LARGE S.A.E. + 30p stamp** to:
Cum-Com Software (International),
Dept THO, Gardener's, 63 Kings North Road, Ashford, Kent TN23 2HZ
Please state format.

GUNFIGHTER

USE YOUR VOICE TO OUTDRAW THE GUNFIGHTER

CASH PRIZES

0898 31 35 90

INFODIAL POBox 36 LS1 4TN Call charges 33p Per Min Cheap 44p Per Min All Other Times

NBS PUBLIC DOMAIN SOFTWARE

OUR SERVICE IS A SHADE IMPRESSIVE!!
(maybe even a shade better than the rest)

LATEST PUBLIC DOMAIN

D250	ANARCHY MADNESS 2	Good mixture of graphics and FX, also great music from 4-Mat
D253	TECHNOSOFT: VECTORCITY	Similar to the now famous Trip to Mars
D254	THE SIMPSONS DEMO	Slideshow and small anim. Poor!
D257/8	TSB MAXIMUM OVERDRIVE	2 Disk set (1 meg) Ace demo. Great anim, graphics & music. Outstanding.
D430	SYNERGY - SYNTHETIC ILLUSIONS	Ray traced pictures by Micheal Kergonna,using Sculpt 4D Very good.
D432	HAVE A LAUGH PICTURE SHOW 6	63 naughty mono cartoons, saucy seaside picturepostcard typehumour!
D579	MORE CLASSY ANIMATIONS	Steve Parker is back with some more cute animations,inc 'SpiderChuck'
D585	SQUIRREL AND AT-AT ANIMATION	A cute squirrel girl chaseing a Star Wars AT-AT with a spanner
D586	DISCOVERY SHUTTLE ANIMATION	Another great animation, this time of the Space Shuttle
M239	PHENOMENA MUSIC	A good music disk. 17 tracks and a good selector screen.
M247	19 - TANKARD	A digitisation of n n n n n 19. Good.
M249	AXIS JOCHEN HIPPEL SOUND DISK	Brilliant! Good, magic, fun, Chip music disk with a difference
M257/8	SILENTS BLUESHOUSE MUSIC/GAME	(2 Disks Set) Certainly the best we have ever seen from the Silents.
G160	VIDEO TENNIS (1 MEG)	Recreation of the original arcade game.
G162	SPACE POKER	Sim of Poker fruit machine. Good
G199	SEVEN TILES	Superb, speedball type game. Brilliant quality. The best ever PD game.
U103	MASTER VIRUS KILLER V2.1	Latest update recognises 124 Virus's.
U602	QUICKBASE	An ultra simple database. Ideal for addresses.
U603	NBS ESSENCIAL UTILITIES	Sid, Virus Expert, Bootmenu, Powerpack, Disksalv,Bootintro, Setkey and copiers.
U313	TO 320 NBS CLIP-ART	8 Disks FULL of excellent Clip Art.

All NBS public domain disks £1.25 each, please add 50p towards postage and packing on total order.
BONUS One extra disk free, for every 10 ordered, plus free postage. Offer does not apply to AMOS Licenceware.

GET THE NBS PD UPDATE NO 6, AND SUPPLIMENT, AN EXTRA 150 DISKS REVIEWED
This is themagazine WE wanted to stop.....But THEY wouldn't let us! A full 20 A4 pages of Tech, Tips, Readers Letters, Virus Info, FULL reviews of the latest PD (not just a list!) great articles, and this months great compition: WIN WIN WIN a colour monitor, 5 memory upgrades....(every entrant gets a £10 off an Upgrade!!) and a years subsciption to CU Amiga! If you miss it....YOU MISS OUT. NO OTHER PD COMPANY OFFERS YOU SO MUCH, FOR SO LITTLE, SO OFTEN
To get your copy simply send 50p plus a stamped self-addressed envelope, to the address below.

AMOS

LATEST AMOS PD AND LICENCEWARE

Please Note:
AMOS PD.....£1.50 per disk
AMOS Licenceware.....£3.50 per disk

NBS: THE NO 1 ORTHORISED DISTRIBUTOR OF AMOS LICENCEWARE IN MARCH

A103/4	(GAME) PICK UP A PUZZLE	(2 disk set, 1 meg) Original idea. A kind of floating jigsaw puzzle.
A105/6	(GAME) PICTURE IT	(2 disk set, 1 meg) A super jigsaw puzzle game, ideal for the youngand old.
A110	(GAME) CROSS FIRE	(1 meg) Collect the items on the grid, beware the mines and gunshipson all4sides.
A115	(GAME) BALLOONACY	(1 meg) Fly your ballon and flatten the buildings. Addictive game.
A124	(DEMO) BOB MANIACS BY SYNTEX	An excellent demo (for AMOS) some very good,and fastroutines.
A131	(DEMO) ARMAGEDDON DEMO BY SYNTEX	(1 meg) Unoriginal but, again, excellent for AMOS.
A135	(EDUC) SIMON AND SPACE MATHS	Learn your sums then blast the Aliens as a reward!

LICENCEWARE £3.50 PER DISK. A PROPORTION OF THIS GOES TO THE AUTHOR

L001	(ART) COLOURING BOOK	(1 meg) Title says it all. Great fun for the kids.
L004	(GAME) THINGAMAJIG	(1 meg) Simple jigsaw puzzles writen for children. 24 in all.
L005	(GAME) JUNGLE BUNGLE	(1 meg) An icon driven adventure game, again, written withchildren in mind.
L006	(GAME) PUKADO	(1 meg) A good game of good quality, and what licenceware shouldbe all about.
L007	(GAME) 4 WAY LYNX	Similar principal to pipemaniabut harder!
Loo8	(EDUC) WORK AND PLAY	(1 meg) 3 Educational games for children. Telling the time and Maths.
L010	(EDUC) THE WORD FACTORY	(1 meg) A spelling and memory game. Good reviewsbut I'm notimpressed.
L011	(GAME) GO-GETTER	(1 meg) A good computer version of what would make a goodboard game. Worth a look.
L012	(GAME) HYPNOTIC LAND	(1 meg) Similar to klax but balls not blocks.
L013	(GAME) JIGMAINA	(1 meg) More jigsaw fun, inc construction kit.

WE ALSO SUPPLY THE FOLLOWING...

KOA Blank branded disks	60p each		100 for £48.00
UNBRANDED DISKS (Various manufacture)	49p each		100 for £40.00
100 cap Disk storage boxes	£8.95	10 cap Library cases	£1.25
4 COLOUR DISK LABELS	30 for £1.00	200 for £5.00	1000 for £15.00
NIGHT CAT DISK LABELS	15 for £1.00		100 for £5.00
Star LC10 Printer Ribbons	(Black) £3.30		(Colour) £5.75
STAR LC 24/10 Printer Ribbons (Black)			£4.95
CITIZEN SWIFT 24/120D Printer Ribbon (Black)			£4.95
DUST COVERS	£2.25	MOUSE MAT	£2.75
AMIGA EXTERNAL DRIVES guaranteed	We use 'em!		£64.95
CUMANA EXTERNAL DRIVES			£72.95
AMIGA 1/2 MEG UPGRADES			£35.00

'ORDERING DETAILS'
Please make cheques/PO payable to NBS, and send to:

NBS (Dept FONE)
132 Gunville Road
Newport, Isle of Wight
PO30 5LH
TELEPHONE (0983) 529594/821983 FAX (0983) 821599

All NBS Public Domain Software...£1.25 AMOS Public Domain...£1.50
1 Free disk for every 10 ordered, plus free postage.
Otherwise remember to add 50p to total order for postage and packing.
All orders (up to 2kg) sent by first class mail. Please add 30p for recorded delivery, if required.
NBS....HERE TODAY....AND HERE TOMORROW TOO.

THE ART OF STRATEGY

PART III – STRATEGY AND TACTICS IN WWII

Following last month's look at post-war manouevring, Matthew Stibbe goes back in time a little to examine the strategic relevance of the Second World War.

To begin at the beginning, World War II was an aggressive war waged on unwilling defenders. Despite Chamberlain's claim of 'peace in our time' the Munich agreement of September 1938 failed completely to slate Hitler's appetite for conquest.

Encouraged by the Nazi-Soviet non-aggression pact, Hitler invaded Poland on September 1st 1939, thus bringing France and England into the war, and then struck France through the low countries on May 10th 1940.

Thus began the great conflict. This brief overview will look at the evolution of strategy at the highest level on both sides of the war in Europe.

The fact that the Germans took the initiative through aggression gave their armies an advantage. They capitalised on the surprise and momentum they could gain by waging an aggressive high speed war (or 'Blitzkrieg').

Using this strategy at its most effective, an outnumbered force could concentrate overwhelming forces at a given point, and thus out-manoeuvre and out-fight local opposition. The aim, however, was not to win the battle, but to transcend the battlefield by going for the jugular.

In many ways the techniques of this warfare were new – armoured columns, parachutists, close air support and so on – but the aim was not. It was the same method that the Germans had used in the Franco-Prussian war of 1870 when they defeated the French army on the field of battle, and then raced to Paris to lay siege to it. The same would have happened – albeit on a grander scale – in World War I, but for the dogged resistance of their enemies.

The British and French on the other hand had arguably learned the wrong lessons from the Great War, and had adopted an essentially defensive mentality. In 1939, this mentality served only the make a strong crust through which the Germans could easily punch a hole. Holland was overrun in five days, Belgium in two weeks, and the Blitzkrieg was launched against France on May 16th 1940, a day after the Dutch capitulation.

The German forces entered Paris unopposed on June 14 and forced France to sign an armistice at Compiegne on June 22, 1940, having forced a British withdrawal from Dunkirk. This lightning war was the model for later German offensives in the Balkans, North Africa, and, on a much larger scale, in Russia.

On the other side, the defensiveness and un-modernity displayed in France was slowly transformed. In many ways the battle of El-Alamein symbolised a turning point. It was the first time that the British had defeated the Germans anywhere. Churchill said of it: "Before El Alamein we never won a battle, and afterwards we never lost one."

Montgomery was reinforced with men and US equipment, while most German transports heading for Benghazi in Libya were sunk by British ships and planes. In other words it was a fight on British terms. The Allies were wedged between the sea and the Quattara depression – the Germans could not outflank them.

On the night of October 23rd 1942, Montgomery began a five-hour, thousand-gun artillery barrage. Then the British columns moved forward to cut a deep salient into the German lines. The Germans and Italians held out for two weeks and then began a fighting retreat back to Libya.

On November 8th 1942, US and British forces landed in strength in French Morocco and Algeria in an operation called 'Torch'. Timed to coincide with Montgomery's offensive, the operation placed them in a position to attack Rommel's Afrika Korps from the West. This was a 'pincer' movement executed on a grand scale.

STORM ACROSS EUROPE (SSI)

I have a real problem with this game – it has me hooked! I'm supposed to be revising for my finals (and finishing this article) but instead I've spent the last four hours playing this game.

Storm Across Europe is a grand strategy simulation of World War II in Europe. Someone has to play the Germans, but the computer or other players can take the parts of Russia and the Allies. The game involves both directing production and fighting a war in the air, at sea, and on land.

Essentially, this concentrates on land-based combat, but it also includes elements such as strategic bombing, submarine warfare, V-2s, atomic bombs, and research.

The military details are abstracted – that is, it's a game of armies and air forces, rather than brigades and squadrons. It loses nothing for this though – if anything it is more accessible because it is abstracted from the technical details of warmaking.

However, there is perhaps a danger that it is also a little abstracted from the painful realities of warfare too. It's interesting to try to follow historical circumstances – for instance invading Russia, bombing England and so on.

What's most surprising though, is that despite the array of opportunities that exist for varying the course of history, history itself seems the best guide for decisions. It's hard to decide whether this is due to the game designers constraining the variables to make it so, or whether I automatically adopt a historical approach, or again whether what actually happened was the most predictable and logical course of events.

It uses a mouse-based interface (with the keyboard as a fallback), but its origins in the pre-mouse world are evident, as the interface sometimes seems over-complex and restrictive.

On the plus side, it's still possible to get through a game in a few hours, although an early defeat is quite common.

I hesitate to say this game is a must for all budding Hitlers, but it certainly is required playing for any proto-Churchills out there. As for neo-Stalins, I would only point to the game variable called 'Stalin's sanity' and say no more.

UMS II (Rainbird)

This is the successor to the successful *Universal Military Simulator*, published way back in the dark ages when Rainbird was owned by MicroProse. Both games were developed by Ezra Sidran.

The original UMS was a tactical battle simulator, which used a three-dimensional map to show the progress of battle. The second game's subtitle 'Nations at War' hints at its breadth. It aims to be a TOTAL military simulator.

Using the *Planet Editor* (not included in the package, but word is that it will be available as an upgrade or at a nominal price to registered users) it's possible to simulate any conflict on any planet in almost infinite detail.

In practice, the three scenarios (or should I say worlds) provided with the game should occupy any player. They are: Overlord (D-Day 1944), Alexander the Great and the wars of Napoleon (by the way, there's also a Desert Storm scenario which is available direct from Intergalactic).

Although the game includes elements such as taxation and production, most of the player's attention is devoted to military manoeuvres. These take place at one of five zoom levels from orbital to divisional. Units can be naval, amphibious, ground based, airborne and even orbital.

Another good point is that the game is totally configurable: the author likens it to a military spreadsheet where every variable is accessible and open to user modification.

On the face of it, this is a game for any serious wargamer. However, the enormous detail or representing the entire globe down to a scale of seven square kilometers has severely affected the game's performance. It uses a technique called virtual memory which involves a great deal of disk activity. This is a nuisance.

A second criticism must be of the user interface. Considering it is such a complicated game, the user interface is surprisingly good, but some apparently simple things still seem to take a long time to do, or require arcane commands to achieve. Again this is not a major complaint, but it does mean that the game requires a considerable amount of time to learn thoroughly. It also requires a lot of patience.

And one last gripe. Frankly, the manual isn't up to the standard of other games from the MicroProse stable, which doesn't help the learning process.

Despite all of these criticisms, UMS II is an outstanding technical achievement. UMS III will probably require a Cray to run properly.

The use of air power, and especially airborne troops was one of the important changes in the nature of warfare that took place in WWII. The allies used airborne troops in large numbers, for example in Normandy, or in Operation Market Garden.

The first use of parachutists on a large scale was, predictably, by the Germans. On May 20, 1941, in a powerful display of offensive air tactics, 3,500 German paratroopers were dropped on the strategic island of Crete. Most were killed, but a second wave of 3,000 quickly captured key defenses and overwhelmed the remaining British troops.

Hitler now had in his possession a strategic Mediterranean island for the dispatch of reinforcements and supplies to his desert troops in North Africa, which were poised for an assault against Egypt and the Suez Canal.

This is too vast a subject to cover even in summary in such a short article. What I have tried to do is set the games I have reviewed this month into a context, and to point out some of the salient strategic issues. Playing these games is better than a history lesson, because they show the 'why' as much as the 'what' or 'when.'

There are some excellent histories of the war, amongst which Max Hastings' books rank very highly, but above all Churchill's war memoirs are invaluable and fascinating.

• In the next article, I hope to cover the war at sea, in the pacific, and on the Russian Front.

DESERT RATS, VULCAN, ARNHEM and FRONTLINE (CCS)

Desert Rats, *Vulcan* and *Arnhem* are old simulations of the desert war in North Africa (El Alamein), the Tunisian campaigns (Kessarine Pass) and Operation Market Garden (the famous 'Bridge too Far') respectively.

Vulcan and Arnhem are based on the same game system with additions for air power and paratroops as appropriate. All offer several scenarios ranging from 30-minute battle simulations, to three- or four-campaign games covering months or even years of real time. Within the limiting context of the gameplay system, each game conveys the essential nature of its subject very well.

There are differences though, Arnhem brings a sense of urgency, as armoured units race to reinforce paratroops dropped behind enemy lines, while Vulcan simulates very well the problems that faced a fresh and well-equipped, but unseasoned, American army in their first encounter with the utterly professional Germans. There is always a sense with Vulcan that victory is inevitable for the allies – but at what cost.

Desert Rats, on the other hand, is a game of supply and manoeuvre, with the Axis and Allied players like two snakes coiled up together along the coast road and struggling to see who suffocates first.

In many ways the Vulcan campaign is the most interesting – mainly as a precursor to the European campaigns of 1944 and 1945. In any case all three games are interesting divisional level simulations that capture a historical moment well, without the sometimes awkward detail of SSI games.

Frontline is a different game completely from the other CCS offerings. In the first place it is a squad level game – in other words it deals with tactical decisions made at the lowest level of an organised army. Secondly, it's been written to use a mouse-based interface. Of all the wargames reviewed here, this has the best user interface.

It provides a number of scenarios – from the D-Day glider landing at Pegasus Bridge, to the assault on Monte Cassino in Italy. It takes into account fire support, close combat, height, lines of sight and leadership among other things.

In other words, this is a very accurate simulation. It manages a lot of the tedious work that stops many board games on the same subject being more enjoyable, but there is still a lot of detail to absorb. The nearest equivalent to it is possibly Sniper! on the Compuserve electronic network, where the 'enemy' is another player accessing the game by modem.

I recommend this one, if only because it provides a welcome relief from the tide of division, corps and army level games that seem the norm in strategy gaming.

103a St Johns Hill,
Clapham,
London SW11 1SY
200 yrds BR Clapham ST.

PHANTASTIC GAMES

16 BIT SPECIALISTS

Telephone:
071-738 0617
24 Hours

Title	Our Price
A-10 Tank Killer	£26.50
A.D.S.	£18.99
Armour Geddon	£18.99
Awesome	£26.50
Back to the Future III	£18.99
Captive	£18.99
Chaos Strikes Back	£18.99
Cruise for a Corpse	£18.99
Deuteros	£18.99
Dick Tracy	£18.99
F-19 Stealth Fighter	£24.50
Full Blast	£18.99
Gauntlet 3	£18.99
Genghis Khan	£30.50
GODS	£18.99
Golden Axe	£18.99
Hollywood Collection	£22.50
Indianapolis 500	£18.99
Kick Off 2 (1 Meg)	£18.99
Killing Cloud	£18.99
Lemmings – SPECIAL	£16.99
Lotus Turbo Challenge	£18.99

Title	Our Price
M1 Tank Platoon	£22.50
Mega Traveller 1	£22.50
Midwinter 2	£22.50
NAM	£26.50
Nightshift	£18.99
Panza Kick Boxing	£18.99
PGA Golf	£18.99
Platinum Collection	£18.99
Power Pack	£18.99
Pro Tennis Tour 2	£18.99
Robocop 2	£18.99
Secret of Monkey Island	£22.50
Sega Master Mix	£22.50
Speedball 2 – SPECIAL	£16.99
St. Dragon	£18.99
Super Off Road	£18.99
Super Skweek	£18.99
Super Monaco G.P.	£18.99
S.W.I.V.	£18.99
Team Yankee	£22.50
Turrican 2	£18.99
Wheels of Fire	£18.99

JOYSTICKS	PRICE
Quickshot 3 Turbo	£9.00
Quickshot 3 IBM	£11.70
Competition PRO 5000	£13.50
Competition PRO Combat	£14.85
Speedking Std	£9.00
Cruiser Black	£9.00
Quickjoy Superboard	£16.15
Quickjoy Megaboard	£22.50

HARDWARE	PRICE
A500 – Screen Gems	£380.00
A500 (1 Meg)	£385.00
5-in-1 Mouse	£27.99
½ Meg Exp. + D. Master	£45.00
½ Meg Exp. + Cinemaware (3)	£55.00

WE ALSO STOCK 8-BIT SOFTWARE ST, PC, NINENDO, SEGA, MEGA, & R.P.G's

071-738 0617

All software/Hardware is subject to availability.
Titles not available will be sent on day of release.

Please state format when ordering.
Please allow £1 P&P on software £5in H/W.

Imagination

Freepost DC 574, Doncaster, South Yorkshire, DN5 8BR

Send for our catalogue for all your role-playing.

Games and computer software for the Atari ST, Amiga, C64, PC, Spectrum, Amstrad, Segamaster & Mega drive, PC Engine, Super Famicom, Game Boy, Game Gear and Nintendo and Console games and miniatures.

0302 786135 (24 hour ans)

HORSE-RACING

COMPUTE-A-RACE+

(As advertised in The Sporting Life)

If you enjoy a flutter on the horses, and own an Amiga, then Compute-A-Race PLUS is an essential purchase written specifically to predict horse-racing results, CR+ not only tips horses, summarises races, weighs up form and evaluates odds; but also calculates bets, notes horses worth following and keeps a record of its own forecasting performance. Featuring on-screen instructions and user-friendly menus, CR+ provides a range of information and advice. Latest version includes updated Flat and National Hunt statistics. Shorten your odds of beating the bookies! Still the best value around for only £9.99 (for a limited period only). (Amiga only).

Only £9.99

CHEQUES/PO PAYABLE TO HANDISOFT
HANDISOFT 37 Hearsall Lane, Spon End, COVENTRY CV5 6HF

RIVERDENE PDL

30a School Road, Tilehurst, Reading, Berkshire. RG3 5AN

Tel : (0734) 452416 Fax : (0734) 451239

DEMOS

AT38	SOUNDS OF KNOME
AT452	BLUE HOUSE
AT524	UP FRONT
AT586	AMAZE MUSIC
AT614	DIGITAL CONCERT 6
AT615	SPREADPOINT
AT664	100 C64 TUNES
AT686	SLEEPING BAG
AT687	KEFRENS 'THE WALL'
AT696	BUDBRAINS II

ART

AT20	C-LIGHT
AT218	NASA
AT346	BUSY BEE (1 MEG)
AT401	FRACTALS
AT629	STEALTHY 2(1 MEG)
AT630	M-CAD
AT631	FAST CARS
AT697	ROBOCOP 2
AT698	TOTAL RECALL
AT705	FUTURE VISIONS
AT729	DBW RENDER

GAMES

AT104	PACMAN 87
AT378	PARANOID
AT512	TETRIX
AT579	DRIP
AT605	BIONIX II
AT625	AUTOBAHN 3001
AT626	TRAIN SET

MUSIC

AT114	GMC
AT285	SAMPLES
AT607	BEATLES MUSIC
AT609	MED V3
AT612	BAGPIPE MUSIC
AT623	SOUNDTRACKER V4
AT699	STUDIO RIPPERS
AT700	IPECS DISCO

LANGUAGES

AT15	68000 ASSEM
AT112	PCQ PASCAL
AT385	C & 68K SOURCE
AT503	PD 'C'
AT545	AMOS LISTINGS 1
AT560	AMOS LISTINGS 2
AT564	AMOS V1.21UPDATE

UTILITIES

AT87	WORDWRIGHT
AT300	QUICKBASE
AT384	BANK N
AT459	DOPE INTRO MAKER
AT534	SCOOPEX UTILITIES
AT578	SKUNKS UTILITIES
AT618	RIM DATABASE
AT619	VISICALC
AT620	D-COPY
AT621	ESA UTILITIES 1
AT622	U-EDIT
AT632	GENELOGY (1 MEG)
AT703	INVADERS RIPPER'S
AT704	P-COPY III

BLANK 3.5" SONY DISKS
10 DISKS £6.00
50 DISKS £24.50
100 DISKS £45.00

WE ALSO STOCK THE COMPLETE AMOS PD LIBRARY & LICENCEWARE DISKS

CHOOSE ANY 3 DISKS FOR ONLY £5.50

ALL PRICES INCLUDE FIRST CLASS POSTAGE & PACKING

FREE CATALOGUE ON DISK WITH ALL ORDERS

FREE PD CATALOGUE ON DISK

(please state Atari ST or Amiga)
when you send a blank disk and SAE to RIVERDENE PDL
ACCESS & VISA welcome

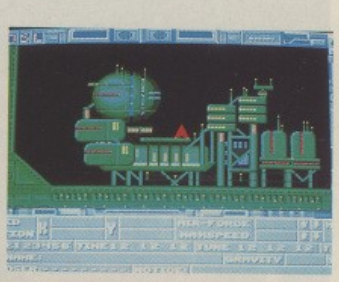
VISA

WHY NOT VISIT OUR SHOP?

Access

Imagine a world just beyond our own. A world where graphics, music and animation spring to life from the minds of programmers. A world that utilises the AMIGA to its limit. You are not imagining, you have just entered...

THE DEMOS DOMAIN



BALLS! OR VECTORBOBS as they're known. This month's in-thing is to have lots of shiny balls rotating around each other against a backdrop of stars. Last month it was fractals, the month before it was triangles and the month before that we had all those psychedelic blurs. How do all the programmers manage to come up with the same ideas at the same time?

Still, while the graphical artistes run around after each other, the musicians are still managing to create original works. This month has seen a tidal wave of good sounds arriving on our doorstep - everything from moody Jarre-esque type tunes to a less musical but more entertaining collection of Vic Reeves samples.

As well as the pick of the month, we want to encourage new talent to emerge into the field of Demos/PD, so as of next month we will be awarding the Amateur Demo of the Month honour to something creative (graphical, musical or whatever) from one of our readers. Let your creativity flow...

SOUND

LADIES AND GENTLEMEN, would you get up from that embarrassing position and put your hands together for Britain's top light entertainer and seamstress... Vic Reeves. A disk chock-a-block with infamous samples such as, "You wouldn't let it lie..." and "What's on the end of your stick, Vic?" is the highlight of the month, but unfortunately can only be heard through a music studio package. Still worth it if you're a fan though. Otherwise it's not a bad month for music with some good tunes emerging from Vocal Attack, Captured, Accel's Music Disk and Music Dream 1 (a particularly nice tune called Swing The Pub in there). Best music of the month, though, goes to Blues House. As well as plenty of excellent tunes, a neat little Thrust game is used as a menu.

PICK OF THE MONTH

NEMESIS COMIC

IMAGINE A CROSS between Blade Runner and The Terminator. A merciless android walking around the streets, killing suspected criminals - whilst inside his head, a human lurks, agonising over every death yet powerless to stop them. Nemesis is a unique idea and one that surprisingly hasn't been thought of before. A story on the computer has one advantage over normal comics: music. An atmospheric soundtrack makes this a nice mid-way point between comics on paper and cartoons on TV. Although only on 1 Meg, Nemesis is worth snapping up right away.

WHERE TO GET 'EM

Nemesis - Comic On A Disk (disk 1272), Vic Reeves Samples (disk 927), Kefrens's The Wall (1281), Accel's Music Disk (926) and Fraxion's Divine Visions (1277 A&B) are available from:
Crazy Joe's
145 Effingham Street,
Rotherham
S65 1BL

Squirrel Vs Walker and More Classy Animations (disk D590) are available from:
N.B.S.
132 Gunville Road,
Newport,
Isle Of Wight
PO30 5LH

Blues House (disk 942 A&B), Captured (disk 948) and System Violation (943) are available from:
A Bit On The Side
8 Thorold Place,
Kirk Sandall,
Doncaster

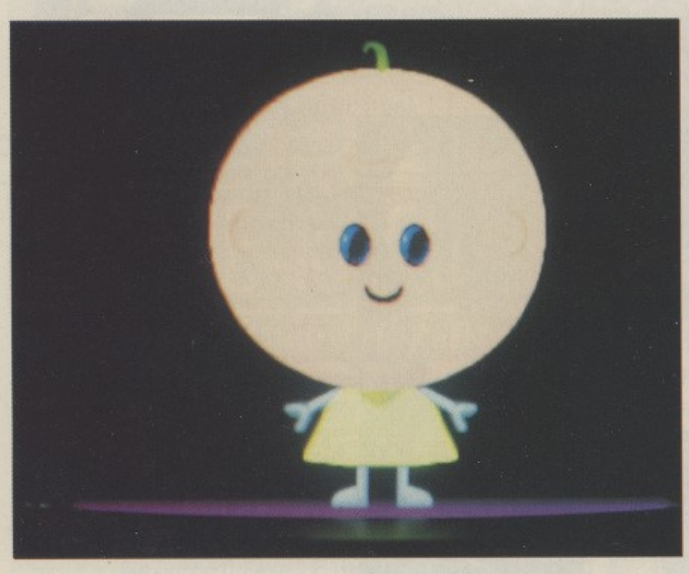
Music Dream 1 (disk 650) is available from:
Start Computer Systems
Barbican House,
Bonnersfield,
Sunderland
SR6 0AA

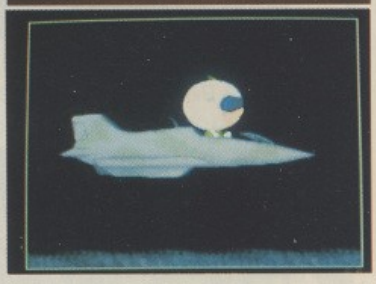
GRAPHICS

MYTHOLOGICAL GODS HAD some of the most muscular figures ever known. Even the women had muscles in places that they didn't even know they had. For owners of 1 Meg machines, Fraxxion Divine gives you the chance to examine (in beautiful detail) a host of these gods, accompanied by an atmospherically eerie soundtrack. Other graphical delights this month come in the form of Anarchy's System Violation and Kefrens' The Wall. The former contains a nice collection of Vectorbobs, starfields, filled 3D and an intelligent Lemming(!) while the latter offers a series of filled 3D objects/vehicles, and a nice-looking scroller.

ANIMATIONS

ONLY TWO THIS month, although both are pretty good. The first, from NBS (the people who brought you Seven Tiles**), is the curiously named Squirrel Vs Walker and presents an AT-AT Walker (you know, from** Star Wars**) being chased by a female squirrel with a wrench. Very strange. The second (again from NBS) is a collection of shorts called More Classy Animations. Chuck makes an appearance (for those that don't know, Chuck is a round-headed guy caught up in a number of different short-but-sweet situations). Torture Chamber is probably the best, but they're all of similar quality.**





VIRUS FREE PD

Amiga Public Domain Software

BUY ANY 10 PD DISKS AT £2 EACH AND PICK ANOTHER 5 FREE!!

OVER 1400 PD DISKS AVAILABLE
PD SOFTWARE HELPLINE
THOUSANDS OF SATISFIED CUSTOMERS
OVER 100 DISKS ADDED EVERY MONTH
MOST ORDERS SENT WITHIN 24 HOURS
ALL DISKS DISTRIBUTED VIRUS FREE

PD STARTER PACK 2
ONLY £5.00 inc P&P
WET BEAVER
TENNIS RSI DEMO MAKER MVK 2.1
5 COOL DEMOS
VOGUE MUSIC COMP

15 PD DISKS = £20.00 inc 5 FREE
ONLY £1.00 FOR EACH SUCCESSIVE DISK. EG:
16 PD DISKS = £21.00
17 PD DISKS = £22.00
20 PD DISKS = £25.00
CALL FOR DETAILS OF DISCOUNTS ON BULK ORDERS.

OVER 1400 PD DISKS CATALOGUED

Official **AMOS PD Disks** Now Available

AMOS Licenceware £3.50 a disks

AMAZING TUNES 2
20 FANTASTIC TUNES
3 DISKS, 1 MEG.

BLANK DISKS
Branded 3.5" Disks
Only **35p** each.
With any other purchase

OVER 18's ONLY
Send for interesting and varied catalogue

GAMES
843 METAGALACTIC LLAMAS
1064 LETTRIX (GREAT)
1020 MASTER OF TOWN
1204 WET BEAVER TENNIS
849 THE HOLY GRAIL
850 BREAKOUT CON KIT
830 QUIZ MASTER
670 MONOPOLY
595 CAVE RUNNER
1209 WACKO IN WONDERLAND
832 AGATRON GAMES
531 BLIZZARD
530 PACMAN
525 TENNIS 1 MEG
509 PARADRIOD
1207 FRANTIC FREDDY
505 DRIP
255 FLASCHBIER
856 XENON 3 ETC
117 MORIA RPG
154 TRACK RECORD 1 MEG
534 GAMES DISK 1
1179 CHESS ETC
1184 MASTER MIND ETC

UTILITIES
659 ESSENTIAL UTILS 1
1206 MANDLEBROT MAKER
1208 DATABASE WIZARD
1078 ESSENTIAL UTILS 2
1099 PRO TRACKER 1.1a
1202 RSI DEMO MAKER
1146 ICON MAGIC
1151 C - LIGHT
1156 DRIVER GENERATOR
1368 SPECCY EMULATOR
1310 MVK 21

MUSIC
1181 TRUE ENERGY
1320 SLABYS MUSIC
1317 "19"
1308 VOGUE MUSIC COMP
1303 IMAGINATION
1322 FLASHING BYTES
1319 ORIGINAL RIPS 3
1323 MATRIX MUSIC 3
1324 BLOOD SUCKERS
1327 TRIUMPH MUSIC 11
1333 AMIGADEUS
1334 THE BEATLES HITS
1338 TURN UP THE BASS
1347 CLASSIX 2
1353 THE BEST OF RAF
1348 HOT WIRED
1217 EQUAMANIA 2

DEMOS
1365 PORKY PIG AINM
1339 COPPER DEMO 2
1318 SYS VIOLATION
1307 MAJOR DELIGHT
1306 EVOLUTION 76
1305 PHENOMINA
1300 FART & BELCH
1297 CLOTHS PEG
1173 PANIC
1180 DISASTER
1167 MOVIE DEMO
1172 ENFORCEMENTS
1185 THUNDER CHILD

FOR JUST £1.00 YOU CAN RECEIVE OUR HIGHLY PRAISED CATALOGUE DISK, GIVING DETAILS OF OVER 1000 PUBLIC DOMAIN DISKS, OR ORDER 3 OR MORE OF THE ABOVE AND RECEIVE IT FREE OF CHARGE.

EXCLUSIVE WARE
CROSSED SYSTEM
MEGA FAST SHOOT EM UP
SILKY SMOOTH SCROLLING
DIGITIZED SFX & SPEECH
MULTIPLE WEAPONS AND MORE.
EXCLUSIVE TO US
ONLY £3.99 inc P&P
CROSSED SYSTEM IS NOT PD

DO THE BART MAN
A 3 DISK VERSION OF THE NO.1 HIT SINGLE
ONLY £3.00inc P&P

MASTER VIRUS KILLER 21
Can now detect 124 Viruses/Bootblocks

RED SECTOR DEMO MAKER
Available Now

VISA

NOW AVAILABLE CLIP - ART VOLUME 2. 3 DISKS, ONLY £3.00 inc

Catalogue Disk Available at £1.00 sent FREE with all orders

Send cheque, or Postal order to:

VIRUS FREE RD (Dept) 23 Elborough Rd, Moredon, Swindon, Wilts, SN2 2LS, ENGLAND.
Tel: 0793 512321 Fax: 0793 512075

ALL PRICES INCLUDE P&P IN UK. MINIMUM ORDER OF 3 DISKS, OVER SEAS ORDERS WELCOME, BUT PLEASE SEND EURO CHEQUE OR BANKERS DRAFT WITH ORDER. PLEASE ADD £3.00 TOWARDS P&P.

John Cook may not have two coins to rub together, but he still somehow manages to be the first down to his local arcade to witness the arrival of the latest coin-ops.

R360 SEGA

HEARD OF THE R360? Then, baby, you haven't lived, because forget about Virtual Reality, what the R360 delivers is the greatest sensory overload you are ever likely to get without taking your trousers off.

Developed by those terribly clever Japanese people (Sega) this is a unit that will turn your whole idea of what a coin-op is upside-down. Literally!

You sit yourself in the unit and you realise immediately that this is something different. For a start the thing looks like that brain-washing jobbie that Joe 90 used to use. Anything could happen in the next half hour, eh? Very Sixties. In fact, before you step into the globe, you know that something dramatic is going to happen, because of the major product liability notice prominently placed at the entrance to the thing. Very Nineties.

No-one under 1.30m tall. Dwarves barred. No heart conditions. No intoxicated persons. No pregnant women. No-one with high or low blood pressure. No-one who has been advised against strenuous activity and finally, no-one who has any mental or physical problems. That's *The One*'s staff out for a start. Still, I lied about my height and slipped through.

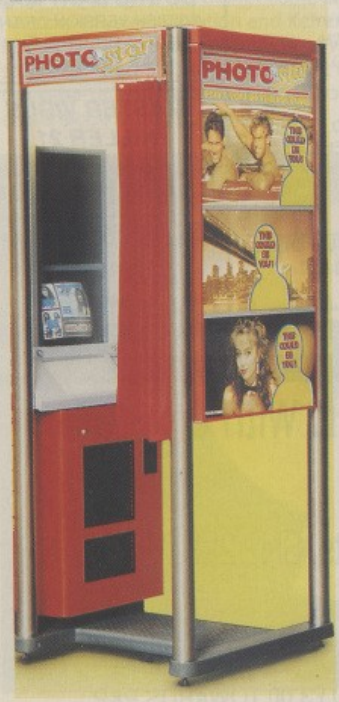
Once inside the unit, a U-shaped yoke comes down over your chest, to which you attach a couple of side belts, then tighten the whole thing up with a handbrake lever placed by your right hand. Claustrophobic? Moi?

Now the action starts, and it's the familiar *G-Loc*/shoot down those planes scenario. First you have the gentle take off, and you begin composing the letter to get your money back. But suddenly... haaaayyyyy!!!!

You know the way that in G-Loc you get that queasy sensation of movement? Well, this is all fine if you have two feet on the ground, but after you've gone around for the third time in the R360, you know why fighter pilots don't have a large breakfast before they take off.

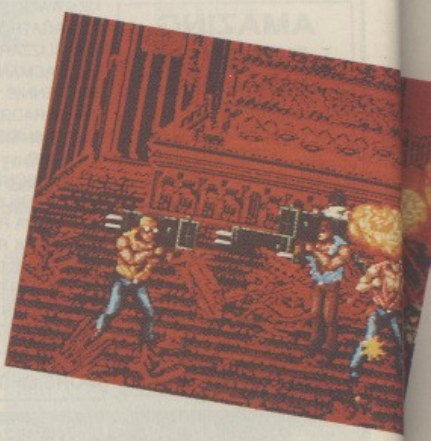
Positive G, Negative G, upside down, 90 degrees to the floor, a session in the R360 leaves you feeling like a sock in an empty tumble drier, but what an experience!!! Presently, the only R360 I know of in the country is at Funland, Luna Park, in the Trocadero Complex, in Piccadilly Circus, London, which itself is probably the best arcade in the country with no fruit machines or one-armed bandits, just row upon row of the latest vids, plus bumper cars and a few novelty rides.Not only can you ride the R360 there (at £3 a throw, alas, but there again, it does cost over £70,000 to buy!) but play four player Super Monaco and Big Run, something the average arcade just can't compete with. Well worth a visit if you're in the Capital.

PHOTOSTAR



TAKING PASSPORT PHOTOS will never be the same again, after this new innovation in photobooth technology. The Photostar. Video Matting technology can not only put you next to a famous celeb (I'm looking for John Major's brain in this snap) but also do sensible stuff like preview an ordinary snap before you have it printed.

Nice dry colour prints produced in a guaranteed number of seconds, which count down before your very eyes. All this and Kylie too! Check it out and shock your Mum!



GROWL

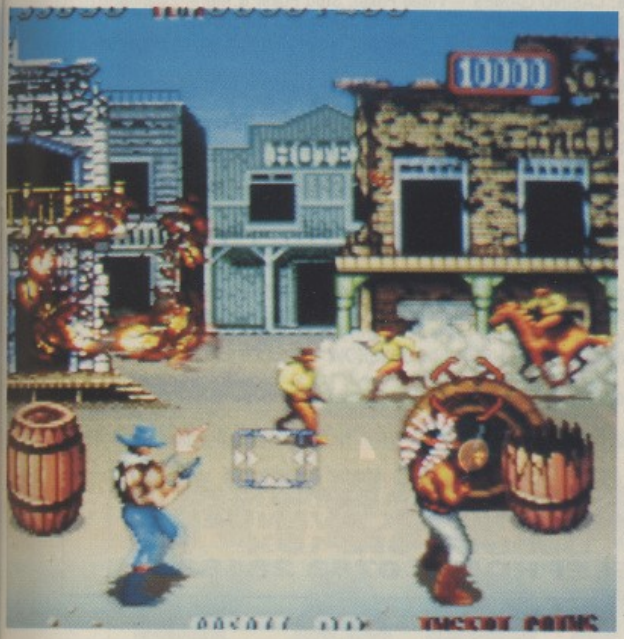
Taito

ANOTHER FOUR-PLAYER BEAT 'EM UP that has become a bit topical because many of the hordes of enemies have tea towels wrapped around their heads. Other than that, there's precious little to recommend it. If you must play a beat 'em up, play *Final Fight II*.

BLOOD BROTHERS

Fabtek

THERE'S ONE THING YOU HAVE TO SAY about Fabtek: at least they are one up on the majority of the coin-op industry. After the success of *Cabal*, most companies would probably have put their collective brain cell together and come up with the radical marketing ploy of *Cabal II*!



Not so here. What Fabtek have done is taken the initial concept of Cabal – with your sprite running along the bottom of the screen and shooting into the scene with a gunsight guided by a trakball – and thrown it back a century or so to the Wild, Wild West.

New sprites, new sound effects, same gameplay. Sounds like something of a recipe for boredom, but the fact that the playability of the original has been retained, maybe even enhanced, has ensured that this is going to be one of the favourite PCB games this summer.

GOLFING GREATS

Konami

KONAMI IS NOT, CURRENTLY, ON A ROLL, creatively speaking. Although it's been coining it in with their Ninja Turtles game, little else of much merit has come out of the factory, despite some neat hardware that can manipulate sprites fairly efficiently.

Unexpectedly, however, we have *Golfing Greats*, the best PCB golf game to hit an already crowded market. For once, the on-board hardware is used well, unlike in *Overdrive*, to provide smooth zooms and sweeps, and the gameplay itself, although nothing radical, has that certain elusive something that makes you want to go back for more.

If you're into golf games, then Golfing Greats is well worth seeking out.

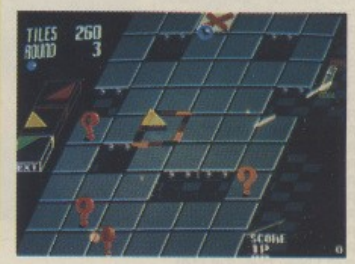
Boreach

Sega

IT'S ARCADE PUZZLE TIME AGAIN, in the great search for the follow-up to *Tetris*! Well, *Boreach* isn't it, but may well form a mild diversion in between the regular bouts of alien genocide.

An isometrically viewed screen of tiles scrolls at a constant diagonal down the screen at an equally constant speed (anyone remember *Zaxxon*?), with a little red ball rolling down the hill. You have to keep the ball on the playfield and guide it into the target tile (but away from the assorted mines, holes and nasty bits) using only a preset selection of deflectors that you place on the screen, using the joystick.

No adrenaline surges here, but it's worth a few goes if you fancy a change



GEMINI SHAREWARE

THE BIGGEST SHAREWARE CO IN USA

NOW IN UK

AMG-101: WHEEL OF FORTUNE – Clone of the classic TV show. Excellent!!
AMG-106: SPACE GAMES – Cosmoroids, Gravity Wars & more.
AMG-110: DOS HELPER – Designed to help you with Amig DOS commands
AMG-114: BLACKJACK + BANDIT (Slot machine).
AMG-115: BULLRUN – American civil war simulation.
AMG-110: DOMINOES – Popular game with good graphics + Tic Tac Too & more.
AMG-128: GAMES 3 – Vegas slot machine, Pegboard, Reversi & more.
AMG-129: BUSINESS 1 – Mail Manager, Label Printer, Address Book & more.
AMG-130: AMOEBA INVADERS – Clone of the classic featuring digitised sounds.
AMG-137: SINKING ISLAND 2 – Text/Graphics adventure 2 disks + 2 drives required).
AMG-142: MCAD – Full featured CAD programme (1Mb).
AMG-143: BACKGAMMON – A great game with good graphics.
AMG-144: SOLITAIRE – Complete with graphics & sound.
AMG-145: TILES – Match the tiles + Kings Korner & more.
AMG-147: CRIBBAGE – Take on the computer II.
AMG-148: BUSINESS 2 – A VC spreadsheet clone.
AMG-151: POTPOURRI 10 – A 'Mercenary' simulation game + 'Tron' game as well.
AMG-168: MICHAEL JACKSON – Digitised audio & visual the megastar.
AMG-173: DELIRIOUS 2 – More from Eddie. 'X' rated (2 disks).
AMG-176: HORROR DEMO – Exploding heads & dismembered arms. 'X' rated.
AMG-182: TOILET PAPER AD – A Brilliantly Funny demo unfortunately 'X' rated.
AMG-206: TETRIX – Based on the classic Russian game 'Tetris'.
AMG-215: CASINO GAMES – Video Poker, Stud Poker & more. Excelllent!!!
AMG-219: PLAY & LEARN – Educational games & 3 fun games.
AMG-224: BACH LOVERS DISK – Contains classical music which plays for 30 mins!!
AMG-230: EASY BANKER – Excellent financial program to keep track of your bank account.
AMG-240: Allows you to design sequential movies & animations.
AMG-242: JACK FROST – An electronic comic book with digitised mono graphics based on the comic strip 'Jack Frost'. Excellent!
AMG-349: ANTEP – Excellent 'Ultima' role playing game + Slot Cars & more.
AMG-351: METRO – Become a city planner like in 'Sim City'.
AMG-501: BUDBRAIN – One of the best demos of the year! 'X' rated (2 disks).
AMG-503: TOTAL RECALL DEMO – Digitised audio & visuals from the film.
AMG-515: SCANNERS – Definitely not for the squeamish. 'X' rated. 1 Mb recommended (2 disks).
AMG-516: GOREZONE HORROR SLIDESHOW – Stomach churning stuff!! 'X' rated.
AMG-520: LAURL & HARDY – Animations of the famous duo (1Mb + 2 disks).
AMG-522: HOLSTON PILS DEMO – 'High Noon Version'. Digitised from the ad.

This is just a small list from our catalogue.
Phone us for a free copy.
Prices: £2.00 per disk 1-9
£1.75 per disk 10-19
£1.50 per disk 20-29

All prices subject to VAT
PC & Macintosh catalogues also available

GEMINI SHAREWARE
10 WARWICK AVENUE
SLOUGH SL2 1DX
TELEPHONE: 0753 28183

DISK CATALOGUE ONLY 75P REFUNDABLE ON FIRST ORDER

P D REBELS (ONE)

BRITAINS BEST VALUE AMIGA PD LIBRARY
THE REBELS TOP 100 "THE BEST OF THE REST"

OVER 1600 PD TITLES ALL IN OUR NEW CATALOGUE

*=1 Meg (2)=2 Disks etc

GAMES
R1 Star Trek * (Strategic)
R2 Star Trek * (3) 2 Drives
R3 Star Trek (2) New version
R4 Star Trek (2) V good
R5 Flash Bier (bolder dash clone)
R6 Return to Earth (Sci-Fi)
R7 Pakman 87
R8 Breakout Construction Set
R9 Pseudo Cop (shoot em up)
R10 Holy Grail * (text adventure)
R11 Golden Fleece (text adventure)
R12 Hack The Classic D+D Game
R13 Bionix * (super shoot em up)
R14 Fish Games (5) (the best from Fred Fish)
R15 Battle Force (strategy game)
R16 Bull Run (civil war)
R17 Moria (D+D game)
R18 Tennis *
R19 Games Pack 1. Arcade games
R20 Games Pack 2. Arcade games

UTILITIES
R21 Word Wright (the PD W/Processor)
R22 Clerk
R23 Visicalc (spreadsheet)
R24 R.I.M. * (great database)
R25 S.I.D.
R26 Flexibase (simple database)
R28 Bankn (finance package)
R29 Jazz Bench
R30 Quick Base
R21 Ultimate Virus Killer
R32 Ultimate Utilities 1
R33 Credit (text editor)
R34 Icon Magic
R35 Cli Tutorial
R36 Virus X
R37 Amiga Fox
R38 Trooper Fonts (D. Paint etc) (3)
R39 C Manual (3)
R40 Utility Disk Set (10)

MUSIC
R41 MED
R42 Soundtracker Inst Set (10)
R43 Soundtracker
R44 Noisetracker
R45 Sonix Instruments + Music (10)
R46 Bart Simpson (3)
R47 Amazing Tunes 2 (3) * Brilliant
R48 D Mob 4 (brilliant)
R49 Star Trecker
R50 Crusaders Bacteria
R51 Rebels Megablast
R52 Crionks Neverwhere
R53 Sound of Silents
R54 Games Music Creator
R55 Pet Shop Boys
R56 C Bit 90 Brilliant *
R57 808 State Remix

DEMOS
R58 Budbrain 1 (2) Over 18's
R59 Budbrain 2
R60 The Run (Amazing animation)
R61 100 C64 Tunes
R62 Mental Hangover
R63 Fraxion Horror (sick!)
R64 Kylie Demo (2)
R65 Blues Brothers (2)
R66 RAF Mega Demo (2)
R67 Elvira Demo *
R68 Predators Mega Demo (2)
R69 Puggs in Space *
R70 New Tec Demo * (2)
R71 Viz Slide Show
R72 Walker Demo 1 *
L73 Walker Demo 2 *
R74 Cool Enough *
R75 Madonna Slide Show (3)
R76 Crusaders Genesis *
R77 Night Breed Slide Show
R78 USA vs Iraq Demo
R79 Total Recall Slide Show .
R80 Real Things (birds & Horses) (2)

GOODIES
R81 Dope Intromaker
R82 The Probe Demo *
R83 Fractal Flight *
R84 Video Applications (2)
R85 Demolisher Utilities (2)
R86 Clipart Set (5)
R87 Boot Champion
R88 Boot Writer
R89 Education Set 1 Age 6+ (2)
R90 Education Set 2 Age 13+ (5)
R91 St Emulator (it works)
R92 Messy Dos
R93 Red Devil Cruncher
R94 Bacteria Demo
R95 Vision Mega Demo
R96 Red Devil Utilities
R97 N Comm (modem software)
R98 Power Packer 2.3B
R99 C Compiler
R100 X Copy

THE BEST DEALS AROUND

Deal 1, 1-9 Disks = £1.75 each
Deal 2, 10+ Disks = £1.25 each
Deal 3, 20+ Disks = £ .90 each
Deal 4, Buy 10 PD Disks and get a free 10 capacity box
Deal 5, No minimum order charge
Deal 6, No post + packaging
Deal 7, No VAT to add
Deal 8, Order before 3 o'clock and we despatch same day
Deal 9, Order 3 disks and get a free catalogue
Deal 10, Come to the shop and get another 25p off all prices.

SEND CHEQUES P/O TO
PD REBELS
52B LONG ST
DEVIZES, WILTS

0380 727419

CARRIER COMMAND

Mirror Image
£9.99

EVERY SO OFTEN a game comes along that's so technically accomplished that the world stops to look on in awe. The trouble is that all too frequently, this awe fades when the technology moves on and the once-acclaimed game is left looking a little sad and dated.

However, due to the depth of its gameplay (no pun intended) *Carrier Command* is one game which has avoided this fate.

Revolving around two 'super-carriers' (each containing a squadron of planes and amphibious tanks), this blend of strategy and action is a long-term battle for control of a string of resource-rich islands (see our 'classic game guide' later in this issue for more details).

If there is a problem with this program, it lies in the time it takes for the carrier to sail from one island to another - the fact that a single journey can take anything up to half an hour to complete could be enough to deter the trigger-happy thrill seeker.

However, dedicated players will be rewarded with a long-term stretch of rivetting - and ultimately rewarding - action. Definitely one for those with a long attention span.

☆☆☆☆

INTERNATIONAL KARATE+

The Hit Squad
£7.99

WHAT COULD BE MORE FUN than watching two pyjama-clad men pound each others' bones to dust? Watching three pyjama-clad men beat each other up of course!

Archer Maclean's superlative martial arts game is still highly regarded as one of the best of the Karate/Kung Fu/Judo/Ninjitsu... erm, beat 'em ups - the main reason for this being its three-player option. Even though one of the participants is always computer-controlled, it's still great fun for the other two to gang up on him if they so choose.

Despite its advancing years, the graphics are still fresh and the music is excellent - especially during the novel pause mode.

The range of moves available is only surpassed by *Budokan* and the bonus levels are imaginative and great fun.

IK+ (as us trendies call it) is an excellent purchase, well worth getting to involve your mates in some seriously violent fun.

☆☆☆☆☆

Paul Presley delves into the pile of recent budget releases and finds some classic shoot 'em up action and more.

STAR QUALITY

☆☆☆☆☆
Excellent
Deserves to be part of anyone's collection

☆☆☆☆
Good
Probably worth buying if you don't already own it

☆☆☆
Average
Worth acquiring if it looks like your cup of tea

☆☆
Poor
Oh dear, this isn't really up to scratch

☆
Dire
Nobody's that desperate

NORTH AND SOUTH

Action 16
£7.99

THERE AREN'T MANY computer games that are truly funny, but *North And South* is one - at least at first, that is. Being based on a series of French comic books, the game uses cartoon-style graphtics to good effect, combining them with wacky sound effects and music. The trouble is though, that when you've seen a joke once, the humour wears off and there's little incentive to go back.

Set during the US Civil War, this is a simple strategic challenge with arcade interludes thrown in for good measure. You either control the forces of the Yankees or the Confederates (respectively representing the North and South - hence the name), with the simple aim of taking all of your opponent's land.

Bullion trains, Red Indians, Mexicans and bad weather are random factors which affect your progress, while the arcade sequences come in to play when you attempt to rob a train, take over a fort or get involved in a battle.

It doesn't take much to figure out how to beat the computer in each fight and subsequently, to win the game. A greater challenge comes from a human opponent, but even this doesn't last too long. Even at this price, North And South will only appeal to the die-hard fan of French humour - does such a thing exist?

☆☆

TIGER ROAD

Kixx
£7.99

OTHERWISE KNOWN AS 'one man and his axe', Capcom's hack 'n' slash scroller first saw the light of day in 1987, to be greeted by a barrage of critical disinterest.

Sadly, things haven't improved with age. The 'man with weapon beating up wave after wave of bad guys' idea has been done to death by now - and *Tiger Road* wasn't a good example of the genre in the first place.

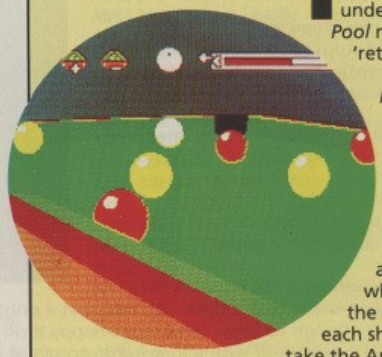
There *are* a couple of nice points though, notably in the audio department. The Oriental music is nicely rendered (although it's nothing special by today's standards) and the sound effects are rather good, except that they don't quite fit the action.

Never a classic, Tiger Road now can't hold its own amongst the likes of *Turrican* and *Gods*, even at this price.

☆☆

3-D POOL

Mirror Image
£9.99



IT'S HAD SEVERAL NAMES and has appeared on virtually every format under the sun, so it's about time *3D Pool* made an appearance on the 'retrospective' scene.

Also known as *Maltese Joe's 3D Pool* and *Sharkey's 3D Pool,* this is probably the most involved simulation yet of the noble art of ball potting, with the title's '3D' referring to the player's view of the fully-rotatable table.

Four different types of pool are offered (including the one where you have to say 'four ball in the corner pocket' or the like, before each shot). The rules however tend to take the American format, so don't expect an extra shot after a foul stroke and watch out for the weird 'behind the line' rule.

As it goes, everything works smoothly except for the disrupting fact that most of the time you can't see the whole table. Otherwise 3D Pool is excellent value if you fancy joining the cue.

☆☆☆☆

KULT

Action 16
£7.99

WEIRD DOESN'T EVEN begin to describe this French adventure-cum-puzzler. The plot is far too strange to even begin describing, but don't let it put you off because the game it hides is quite a pleasing little jaunt into the realms of fantasy.

You play the part of a psychic warrior, hell-bent on rescuing your beloved from the grip of a jumped-up alien invader, who claims that he has first rights to ruling the universe or some such nonsense.

Your quest comes in two parts, the first a series of puzzles, the second a more standard exploration/adventure. Both are icon driven, but with one of the strangest icon menus ever. A representation of your brain is called up with all your thoughts on how to deal with the current situation highlighted. Pick a thought and carry it out, how's that for weird?

Kult is really a 'love it or hate it' game - and I love it! There are a lot of really nice touches throughout, coupled with truly stylish graphics and sound effects. Mostly though, the whole thing generates more atmosphere than a Gazza romp at White Hart Lane.

Dare to be different.

☆☆☆☆

FREE PD?
RING FOR FREE INFO PACK!
WHAT HAVE YOU GOT TO LOSE!

FREEPHONE 0800 252 623
Or (051-924 0200)
(24 HOURS)

Diners Club International · Access · VISA

Or Post Free To:
UNBEATABLE PRICES,
FREEPOST, LIVERPOOL, L23 0XH

SONY 3.5" DISKS SONY

PD Service — The Best Disks-The Best Service-The Best Prices — PD Service

DISKS		
10	3.5" DS/DD	£5.90
20	3.5" DS/DD	£11.50
30	3.5" DS/DD	£16.50
40	3.5" DS/DD	£21.50
50	3.5" DS/DD	£26.50
100	3.5" DS/DD	£49.00
200	3.5" DS/DD	£89.00
500	3.5" DS/DD	£210.00
MORE		CALL

Use Our Creditcard Hotline!!!
ACCESS - 0742 726485 - VISA
We Only Use Sony Disks.
Lifetime Guarantee. Same Day Despatch When Ordered Before Noon. Prices Inc Vat & Postage.
New PD Library
Every Disk Order Includes Latest Catalogue Disk
(£12.50 Per 10 Inc 1st Class Post)
Cheques Or P.O.'s To:

0.5Mb Mem	£29.99
0.5Mb With Clock	£34.99
Cumana Drive	£64.99
CBM A590 20Mb	£279.99
Philips 8833 Mk 2	£259.99
CBM 1084S	£259.99
Disk Boxs	
Only With Disks	
40 Cap Box	£3.90
80 Cap Box	£5.90

HARDWARE DISTRIBUTION
Dept (TOAM), 28 Furnival Gate, Sheffield, S1 4QP
Telephone Orders Welcome On 0742 726485

IF AN ADVERT IS IN PRINT, IS IT PROPER?

Most advertisements are perfectly proper.

A few are not.

The Advertising Standards Authority not only monitors over 850 advertisements every month, it ensures compliance with the rules in the strict Code of Advertising Practice.

So when you question an advertiser, they have to answer to us.

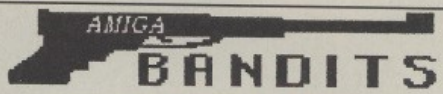
To find out more about the role of the ASA, please write to the address below.

Advertising Standards Authority, Department X, Brook House, Torrington Place, London WC1E 7HN.

ASA

This space is donated in the interests of high standards in advertisements.

ALIENS
Can You Kill The ALIENS For CASH PRIZES
0898 313 573
Infodial PO Box 36 LS1 4TN Call Charges 33P Per min Cheap Rate 44P all other times



AMIGA BANDITS
AMIGO'S WITH AMIGA'S

AMIGA BANDITS PDL (DEPT THO A)
GROUND FLOOR,
28 LEMSFORD ROAD,
ST ALBANS
HERTS AL1 3PB

FREE POSTAGE FIRST CLASS

DISKS NOW 85P

YOU WANTED IT SO WE GAVE IT!
YES THATS RIGHT ALL DISKS ARE NOW ONLY 85P INC. P&P

U001	Amibase V3.76 / Excellant database
U004	Workbench plus / Workbench replacement
U101	Visicalc / powerful spreadsheet
U061	Master Virus Killer / Kills 105 viruses
U065	M-CAD / Computer Aided Design utility
G001	All new Star Trek game / 2 disks 512k or 1 meg
G017	Star Trek game / 3 disks 1 meg 2 drives
G021	Pacman 87 / Pacman game
G022	Goardgames compilation / Classics - Cluedo etc
G023	Return to Earth / Space trading game
G	Amoeba Invaders / Space invader game
A002	Walker demo II / 1 meg
A008	Star Trek fleet manouvers / (Animation) T. Richter
A012	Puggs in space / Cute alien visits Earth !
A075	Probe sequence / (Animation) Been on TV !
A254	Budbrain II / Superb gfx & music
A260	Lost Ark demo / (Animation) Indy shoots swordsman
A261	Fraxion horror demo / Gory over 18 demo
A262	Robocop II demo / Superb slideshow demo
A	Total Recall demo/Nice. from Timecode
M025	Digital concert II / 12+ mins of House
X010	Sabrina - Boys, boys, boys / over 18 !

512K MEMORY UPGRADE ONLY
28.99 POST FREE

FEATURES:
Top quality PCB. Latest low power consumption D-Rams Enable/Disable switch Easy fitting Clock version available (Add £4.50) Price includes postage and packing. Cheques payable : ABPD

To advertise in this section call Ian Knibbs on
071-251 6222

THE One GET SHIRTY

Why not put the winter weather behind you, focus your thoughts on the summer and pick up the latest item in The One Clothing Collection – the super stylish The One t-shirt. It's what every dedicated 16 bit enthusiast will want to be seen in this year! The t-shirt has been exclusively designed by The One's own art editor, Gareth 'Armani' Jones and is available in sizes small, medium and extra large. At the bargain price of only £5.99, it's surely a fashion accessory that no The One reader can possibly be without!

There's no better way of keeping your copies of The One in pristine condition, than in your brand spanking new binder. Available for a mere £5.99.

THE ONE BINDER ▶

Order without delay. Simply complete the form below enclosing your postal order or cheque, made payable to

EMAP IMAGES MERCHANDISE

and send it to the following address

Please remember, these top quality items must be handled with the utmost care by our dispatchers – therefore do allow 28 days for your order to be fulfilled.

PC WISE, UNIT 3, MERTHYR INDUSTRIAL PARK, PENTREBACH, MERTHYR TYDFIL, MID GLAMORGAN, WALES CF48

THE One **The One t-shirt** £5.99 SMALL ☐ MEDIUM ☐ EXTRA LARGE ☐ THE One

The One Binder £5.99 ☐

I enclose a cheque/postal order for £ ..... made payable to ***EMAP IMAGES***

Name: .....

Address: .....

Post Code: .....

(All prices include postage, packing and VAT)

Please send your orders to:

The One MERCHANDISE OFFER
PC WISE UNIT 3, MERTHYR INDUSTRIAL PARK,
PENTREBACH, MERTHYR TYDFIL, MID GLAMORGAN CF48 4DR

BRIAN NESBITT'S HELPING HANDS

Computer gaming's second most legendary hack opens the doors to a new era in tips, solutions and all-round help for the stranded...

If I see one more list of *Lemmings* codes I will not be held responsible for my actions! With these arriving at a constant rate of more than five a day, the tips file now looks like a volume of the *Encyclopedia Britannica*, so stop sending them in – erm, please? Right, now that I've that off my chest...

Welcome to the new-look, easy-to-use, something-for-everyone Helping Hands section (cue applause). Over the coming months you'll find not only in-depth play guides to the latest games (often compiled by the authors themselves), but also a regular guide to a classic of yesteryear (or even yestermonth), two pages of cheats and tips provided by your fair selves and more of our ever-popular adventure solutions.

There's still a problem though, and we need your help to solve it. Each month we hope to print a selection of your queries, which I'll do my best to answer. Unfortunately I don't know everything, so, if you know the answer to a particular question, please send it in.

Also, the number of contact names and addresses is still fairly low, so if you've completed so many games that your computer is screaming 'no more', then let me know. You *will* be rewarded.

And now, without further ado, it's time to get this show on the road...

CHEATS

ATOMIC ROBOKID
Type Tuesday 14th on the title screen to encounter a menu which gives access to infinite lives and all weapons.

DRAGON BREED
Pause and type IREM to achieve infinite lives. Also, pressing 'N' now skips a level.

ESCAPE FROM THE PLANET OF THE ROBOT MONSTERS
When you come to the End-Of-Level Monster, stand at the top (beside the door) and waggle your joystick. Use all of your bombs and squeeze through.

GHOSTS AND GOBLINS
Achieve a high score and enter your name as (!) to deactivate the sprite detection. This, if you haven't already guessed, makes you indestructible.

JAMES POND
During play, press any key on the bottom row of the keyboard to skip levels. And while you're at it, press 'D' to kill all of the monsters on the current level?

STRIDER II
Press 'Help', 'Left Shift' and '1' simultaneously - now, pressing '1'-'5' skips to different parts of the level. And if that's not enough, 'F1'-'F4' skips levels entirely!

FROM: GRAEME KRZYSIAK, NORTHUMBERLAND

F-29 RETALIATOR
On the enrolment screen, type CIARAN for infinite weapons.

MANCHESTER UNITED
Press the left mouse button to activate the two-player game, making the hardest teams easy to beat.

FROM: ANDREW BUCHAN, GLASGOW

LOST PATROL
Rest for 50 minutes, and – for no loss of food – your strength and morale is restored by a few points. This restores all of your remaining men to 99 per cent.

TIME MACHINE
Enter DIZZY on the high-score table for infinite lives.

FROM: DANIEL OSIB, PETERBOROUGH

THE SPY WHO LOVED ME
Type MISS MONEYPENNY during play and then press 'F10' to skip a level.

WIZBALL
Pause and type RAINBOW. When you restart, press 'C' to fill the cauldron, 'S' to skip a level and 'T' to complete the game.

FROM: MARCUS TYLDOLEY, LEEDS

BLOOD MONEY
Pause and press 'Help' for infinite lives and cash.

CHIP'S CHALLENGE
Simply press 'C' to skip a level and 'F' to reveal a page of greetings.

FROM: IAN LOCKWOOD, TROWELL

RAINBOW ISLANDS
Type in some of these codes for various effects:
BLRBJSBJ - for Fast Feet;
RJSBJSBR - for Double Rainbows;
SSSLLRRS - for Fast Rainbows;
BJBJBJRS - for Hint A;
LJLSLBLS - for Hint B.

TEENAGE MUTANT NINJA TURTLES
This one is for arcaders only! Before inserting any coins, press your selected player's button - and keep pressing it fast as you put your money in. Now when you start, you'll have six lines of energy instead of one.

TEST DRIVE
To avoid falling off the cliff, hold down 'Fire' to glide around corners.

FROM: MATTHEW BELL, RADCLIFFE

NINJA SPIRIT
If you die on any level after you've collected a Shadow or Power-Up, simply walk back to pick it up again when you restart.

FROM: ADRIAN KAY, WOGGA WOGGA (AUSTRALIA)

NIGHT SHIFT
Level Codes:
2 - CHERRY BANANA BANANA LEMON
3 - BANANA CHERRY PINEAPPLE PLUM
4 - PINEAPPLE LEMON PINEAPPLE PINEAPPLE
5 - PINEAPPLE PINEAPPLE LEMON CHERRY
6 - CHERRY PLUM PLUM PINEAPPLE
7 - CHERRY PINEAPPLE LEMON BANANA

NITRO
Before starting, enter your name as MAJ to fill up with fuel and cash.

FROM: ALEX BRIFFITT, WESTON-SUPER-MARE

CADAVER

Here, at last, is the final part to our epic voyage through The Bitmap Brothers' 3D exploration game, with aid from the boys themselves and Philip Wilcock.

Last issue, we stopped with you dangling halfway through level four – well, dangle no more, as it's time now to get back to where we left off...

40) Upper Kitchen. Drop the full oil flask on the flame. The resulting fireball destroys part of the shelf allowing the ball to drop and smash. Inside is a key, collect the key. Return to Wulf's View.
41) Wulf's View. Unlock the door to the South using the spell. Exit S.
42) Carver's Hall. Throw the stones through the bars so the ball pushes the potion through the bars. Collect the Giant Jump potion. Return to Wulf's View and use the potion to recover the key from the platform. Return to the Carver's Hall and use the key in the lock. Exit S.
43) Southwest Hall. Drop a candle in the small red circle and then kill the demon. Exit S.
44) Small Store. Place the copper bowl below the pump's spout, pump the handle until water appears in the bowl. Take the bowl and return to the Cistern Room.
38) Cistern Room. Unlock the door to the East. Drop the bowl of water onto the cistern, water should now flow along the pipe. Exit E.
39) Oil Store. Place the oil flask below the tap on the barrel, when the barrel is full, turn the tap and collect the oil flask when it is full. Return to the Upper Kitchen.
40) Upper Kitchen. Drop the full oil flask on the flame. The resulting fireball destroys part of the shelf allowing the ball to drop and smash. Inside is a key, collect the key. Return to Wulf's View.
41) Wulf's View. Unlock the door to the South using the spell. Exit S.
42) Carver's Hall. Throw the stones through bars so the ball pushes the potion through the bars. Collect the Giant Pump potion. Return to Wulf's View and use the potion to recover the key from the platform. Return to the Carver's Hall and use the key in the lock. Exit S.
43) Southwest Hall. Drop a candle in the small red circle and then kill the demon. Exit S.
44) Small Store. Use a combination of Unlock Chest and Dispel Trap spells to open the nested chests, collect all the contents and Exit N and then E.
45) Little Passage. Unlock the South door using the grey key.
46) Box Room. Pull the lever and then return it to the up position. Exit E.
47) Halb's Delight. Slide around the large boxes until a gap is made in front of the door, one or two of the blocks cannot be moved and the one in front of the door has a life of its own. Exit N.
48) Inner Passage. Use the Giant Jump potion to reach the wooden shelf, collect the Immortal potion and casket, open the casket and collect the four tokens. Pull the lever and exit E.
49) South Passage. Drink your Immortal potion and jump over the spikes pull the lever to blow them up. Exit S.
50) South Chamber. Open the chest, collect the gold key. Slide around the tiles that spell DIANOS so that they read the same along the other track. Exit N.
51. Warden's Room. Search the thief, he needs an Alkali potion to make him feel well enough to talk to you. Exit S and E by casting the Unlock Door spell.
52) Helm's Doom. Collect the bottle that restores alkali balance and return to the Warden's Room. Give the bottle to the thief, he will eventually give you the combination to escape, 1432. He will then ask you to bring him a poison. Exit S, then E, then N.
53) Gambler's Den. Use the three tokens to gamble on the rotundas. The extreme right-hand one is a low risk, low return machine that provides extra tokens. The middle rotunda is higher risk higher return that also provides green tokens. The left-hand rotunda gambles tokens for potions, money, or an occasional key. Use the right and middle rotunda to generate as many tokens as possible then use them in the left-hand machines to get potions and a grey key. There is a Magic Missile spell hidden behind the stairs. When you are satisfied (or broke) exit E.
54) Malladin's Pits. The four pits lead to four different challenges: W. The Resting Chamber – use the fertiliser to grow a shoot so that you can reach the lever, pull it and collect the chest key. Open the chest and collect all items except the books. Drink the Sweat potion (for strength) and push the metal bars aside. Wait until the clock has gone around four times and then unlock the door. Exit N and collect the Fizzy potion (poison). Follow the Exit sequence. Give the poison to the thief. Return to Malladin's Pits. N. Great Pit – collect the gold and follow the Exit sequence. S. Outer Pit – keep collecting the money sacks, if the roots start to grow in front of the door, leave (the door only unlocks after a certain amount of time). The roots will eventually block off your exit so be careful. Collect the Dispel Trap spell. Exit S. and then S. then follow the Exit sequence. The door only unlocks after a certain amount of time. E. Fire Pit – withstand the fire balls until part of the metal flooring disappears, drop through and exit S. Collect the three spells and follow the Exit sequence. Exit sequence – from the Great Pit go E-S-S-S you will now be in the Inner Passage, retrace your steps back to Malladin's Pits. From Malladin's Pits exit E, then E.
55) Southeast Hall. Cast Dispel Evil and kill the two demons. Use the Unlock Door spell to exit N.
56) Learned Hall. Pull lever and exit W.
57) Symbolists' Hall. Remember the order of the shaped blocks on the posts. Exit E, then E.
58) Symbolists' Hall. Pull the levers in this order Left, Right, Right, Left. A button should now have appeared on the wall. Press it (the aim of the puzzle is to arrange the shaped blocks in the same order as those in the other room. Exit E.
59) Book Store. Read the books and note their contents for clues. Read books several times to see if there is more than one message. Exit W, then W.
60) Symbolists' Hall. Press the button then exit W.
61) Sealed Chamber. Open the chest and collect the planet (Earth) without pressing any of the buttons, then exit E, then E.
60) Learned Hall. Exit N.
61) Learned Hall. Exit E.
62) Quadratica (this is later referred to as the room with square walls). Do not bother opening the chest. Read all the books, and collect the Dry Sandy Planet (Chaos). Exit W, then N.
62) Learned Hall. Exit E.
63) Dianos' Library. Read all books, keep reading the book on marriage and funeral customs of the Southlands until a spell appears. Collect the spell. Search the tapestry and collect the small key that emerges. Exit W, then W.
64) Side Chamber. Do not bother with the puzzle in this room unless you feel like it. It is not essential to completing the game. Exit W.
65) Nameless Room. Open the chest and collect all the contents. Cast the Read Magic spell on the unknown spell. Return to the Quadratica.
66) Quadratica. Position the chest along the north wall, fifth tile from the left, jump onto it and then jump up, your head should hit a secret panel and a small white planet should fall out. Collect the planet (the Moon). Return to the Learned Hall.
67) Learned Hall. You have to set the four levers to four numbers in any order. You do this by setting a level to either +, - or neutral. For example the number 29 is made by adding 27, subtracting 3 and adding 1. Thus the levers will be in the following positions 27 - up, 9 - mid, 3 down and 1 - up. Use this principal to create the numbers 29, 32, 16 and 7. Once you have done this the door to the West will unlock. Exit W.
68) Queen's Library. Cast Unlock Chest, collect the planet (Sun). Exit W.
69) Wisdom's Hall. Collect the planet (Red) and return to the nameless room (65) and exit S. to the Upper Room.
70) Upper Room. You should now have five planets in your rucksack (Earth, Sun, Moon, Red and Chaos), these will be dropped through the holes in the floor to land on spikes in the Planetarium (North of the Queen's Library). They should be dropped through the following holes: Top – Sun, Left – Red, Right – Moon and Bottom – Earth. Now return to the Queen's Library and exit N.
71) Planetarium. Because you got the planets in the correct positions, the globe in the centre has stopped spinning. Search the globe, press the hidden switch, collect the two keys and return to the upper room.
72) Upper Room. Drop the Chaos planet through any of the holes and return to the Planetarium.
73) Planetarium. Press the button on the black globe and collect the grey keys. Return to Wisdom's Hall.
74) Wisdom's Hall. Collect all the wooden planks and Exit W.
75) East Passage. This is the final approach to the last room. Use the grey key you collected from the Planetarium in the keyhole then use the planks to cross the floor without touching it (it is electrocuted). Exit W.
76) Central Hall. In here are three demons. First cast a Dispel Evil spell, then give them everything you've got. Once they are dead, insert the four gold keys into the four keyholes in the order given to you by the thief: 1 is the extreme left-hand keyhole and 4 is the right-hand one. Once this is done, walk to the centre of the room and go to level 5.

At last you have reached the final level of Castle Wulf. Dianos is waiting for you in the final room. The aim here is to collect the necessary items for his destruction and to reach that final room. Dianos has left a profusion of traps and puzzles to stop you. You will need all the skills that you have gained in the previous levels to succeed – best of luck.

1) Great Tower. Quickly get the marble gem stone and exit E.

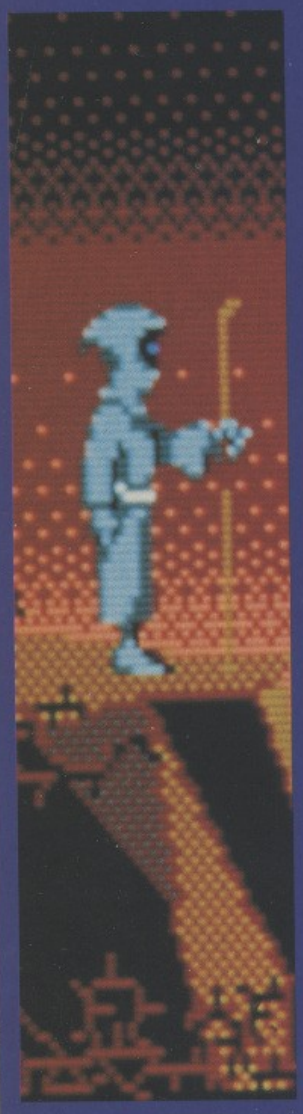
2) North Bridge. Get the second marble gem stone and find the pressure pad located close to the South wall. Walk over it to reveal a skull lock. Go and insert the two marble gems into the skull lock and exit E.
3) Ward Room. Hump up on the posts and get the potion bottles (do this quickly as the gems are damaging your health). Exit E.
4) Helm's Bridge. Pull the first lever and go under the wooden block when it raises. Pull the second lever and run to the East door. Stand as close as you can get to it and wait, the two flails that appeared will not harm you. Run back, press the hole and get the flask that appears. Finally, pull the third lever, wait for a few seconds until the door unlocks, then exit E.
5) Helm's View. Get the Emerald gem and exit E.
6) Great Chamber. Open the chest (Reading the book for clues) and get the Dispel Trap scroll and cure the poison flask. Go down the stairs.
7a) Cellar Stair. Open the chest and collect the mind blast orb and green gems (the gems you collect are powering up your mind blast spell in readiness for the final conflict). Exit E then S.
7b) Main Cellar. Open chest, collect Bless Potion spell and urn, return to Cellar Stair. Place the urn under the steam hammer and pull the lever. The urn will smash and you should collect an emerald.
7c) Great Cellar. Open the chest and collect the Magic Missile spells (however, these are a bit of a red herring and almost useless). Exit S.
8) East Cellar. Open the chest and pick up the two Red potions. As the note says, you can only pick up one of the Black potions. They are both Stamina, one has a single dose of 200 and the other 10 doses of 20. Get the 10 of 20 stamina potion and cast the Bless Potion spell on it – this provides you with more stamina than casting it on the other potion.
9) Great Chamber. You have now been teleported back to the Great chamber. You must quickly jump for the posts that have the caskets resting on them, getting the caskets as you go. Open the green casket and get all the gems. Open the red casket and get the Dispel Trap spell the exit S.
10) East Passage. STOP! You must now get all the gems, but beware of the floor, there are four pressure pads that transport you to one of the confrontations with Dianos... We'll leave you to discover which tiles are the bad ones! Exit S.
11) The Separator. Avoid touching the black spheres, as these will explode and harm you. Collect the key, pull the lever and use the key in the keyhole. Return to the Great Chamber. Use strength to pull back the wooden block from the door. Exit E.
12) Outliette. Search the skull, collect the token and tiger's eye gem, read the book. Return to The Separator. Exit S.
13) High Passage. Pull the middle lever. Climb the wooden ladder, trigger the wooden block by standing in the corner. You must avoid the flail, collect all the green gems and finally the key. Exit S.
14) Axel's Leap. Collect the money bag and the red orb. As soon as you go round the far side of the pit you'll trigger the flails. Jump to avoid them. Exit S.
15) Sea Watch. Dispel the trap on the wooden chest, open it and collect the extra-strong spider poison and money sack. Insert the key in the keyhole and exit W.
16) Axel's Fall. Time the moving of the wooden block, and insert the two emeralds onto the eyes of the skull lock. Jump across the central block of the wooden floor and exit W.
17) Brokson's Hall. Open the wooden chest and collect the piece of lead and all the coins. Pull the upper lever and get onto the elevator. Drop the poison on the floor and the spider should drink it, after a few seconds the spider should die leaving behind a key. Pull the upper lever and go down to collect the key. Pull the lower lever to make the bars disappear. Pull the lower lever on the west wall and climb onto the elevator and go to the upper level. Use the key in the keyhole and return to the lower floor. Exit W.
18) The Void. You cannot collect the flask or money sacks – just the jet. The exits to this room are located about halfway along the North wall and at either end of the West wall. Exit N.
19) Dispel trap on the strong box and open it to collect the coins. Collect the Magic Shield potion, stand on the strongbox to press the secret panel, collect the ruby that falls from it. Return to the void and then exit using the lower of the west wall doors.
20) The Lord's View. Touch the numbered panels until they are set 7 4 1, this should unlock the door to the south. Exit S then S again.
21) Lord's Watch. Press the two secret panels to collect a red casket (be sure to read the note) and the two keys. Exit N.
22) Side Room. Open the chest and collect what money you can. Return to the void and Exit through the upper of the West doors.
23) Great Bridge. Insert the two rubies into the first skull lock, then insert the key into the lock and insert the token into the slot. Exit W.
24) West Ward. Collect the amethyst and the green casket. Open the green casket and collect all the gems. Now drink your strength potion and slide the wooden block so that you can reach the door and the lever. Pull the lever and exit W.
25) Magnus' Watch. Avoid the steel shots and insert the amethyst into the appropriate skull lock. You can now open the red casket and collect the lead. Exit North.
26) High Parapet. Pull the lever and climb onto the elevator, jump over the wooden platform with the book on it. Open the chest and collect the Stamina potion. Return to Lord's Watch via the void.
27) The Void. Collect the two money sacks and the Turquoise Water potion.
28) Lord's Watch. Drop the two lead pieces and Ragnar's bottle into the bowl. The bowl should bubble for a while and reveal two pieces of gold. Return to Magnus' Watch.
29) Magnus' Watch. Insert the two pieces of gold into the skull lock. Exit N and then N again.
30) Inner Watch. Collect the key and open the chest. Collect all the green gems, the two jades, the red casket and the flask of blood. Exit E.
31) Caliban's View. Drop the red casket and return to the Inner Watch.
32) Inner Watch. Open the green casket and insert one of the jades, return to Caliban's View and open the red casket – but do not collect the Bloodstone. Return to the Inner Watch and repeat the process with the second jade.
33) Caliban's View. There should now be two bloodstones on the floor. Collect the blood key and return to the Inner Watch, pull the lever and exit S to the High Parapet, throw yourself down the pit.
34) South Cellar. Pull the lever and face the consequences. Exit N to the main

Cellar, unlock the door using the blood and exit W.
35) Caliban's Cellar. Collect the piece of jet, open the secret panel and collect the banish scroll (this is to defeat Dianos). Stand on the carved skull and throw the flask of blood at the pentangle. You will be transported to Caliban's View. Collect the two bloodstones and exit E.
36) Inner Ward. Collect the Petrify spell, cast this on the turquoise gem that results. Exit N onto the Open Bridge.
37) Open Bridge. Pull lever and exit N, then W, then descend the revealed stairs.
38) You should now be down stairs. Collect the Dispel Magic spell. Open the red casket and collect the second piece of jet. Open the strong box and collect all the green gems. Return to the Ward Room.
39) Ward Room. Cast the Dispel Magic on either of the power gems. This should provide you with the final piece of turquoise. Return to the Inner Ward and exit E.
40) Axel's Stand. Collect the Orb, open the secret panel and collect all the green gems. Return to the Inner Ward and descend the stairs.
41) Cellar Stair. Place the two red orbs under the hammer (one at a time) and pull the lever. You should now be able to collect two opals and return to Axel's Stand.
42) Axel's Stand. Insert the two opals into the skull lock. Exit E.
43) Last Watch. Drop the immortal potion, drink it while it is on the floor and run across the wooden spikes to the South door. Exit S.
44) Last Bridge. The three skull locks accept the following gems: from left to right, turquoise, tiger's eye, jet. Insert all six of these gems and exit S.
45) Guard Post. Touch the skull lock and let your energy drain until it stops, you may then insert the two blood stones. Exit W.
46) Inner Chamber. Open the strong box and insert the Banish spell and the orb of Kamul. Drink the Stamina potion to return all your lost energy from the previous room. Exit N and then W.
47) Dianos' Lair. This is the main chamber where you will confront Dianos, remember it well. Exit through the middle of the West doors.
48) Great Cellar. Collect all the green gems and return via the cellar stairs to the Last Watch.
49) Last Watch. Collect the Immortal potion, drink one dose and run across the spikes to return to the inner chamber.
50) Inner Watch. Insert the immortal potion into the grey strong box and return to Dianos' Lair.
51) Dianos' Lair. Open the grey chest and collect all its contents (Banish spell, Immortal potion and Mind Blast orb). Wait till Dianos appears, cast the Mind Blast spell. Drink the Immortal potion, approach Dianos and cast the Banish spell on him repeatedly until he blows up. Collect his head and exit through the middle door.

● You have now finished *Cadaver* – in the last room your status will be displayed. This whole series of solutions has outlined the simple way through the game. However, there are several hidden bonuses that can be achieved in each level – happy hunting.

Loom

Part the fourth (and final). In which Bobbin Threadbare loses his distaff, discovers the cause of the chaos in the Loom and finds out what happened to his missing people.



BOBBIN THREADBARE, LAST OF THE GUILD OF WEAVERS, was searching for the rest of his villagers after they had been transformed into swans and kidnapped. His journey had taken him away from his childhood home of Loom Island and onto the mainland where he had encountered many weird and wonderful sights.

Along his travels Bobbin had learned of an evil plot, somehow linked to the other Guilds of the land, by a sinister figure known as Bishop Mandible. Bobbins search led to the Guild of Blacksmiths. Now read on...

Woe! Bobbin Threadbare had entered the city of Forge in the hope of finding a clue as to the location of the rest of his Guild. Instead he wandered around aimlessly until a large worker called Stoke took his distaff from him to use as firewood!

And worse still, because he was disguised as Rusty, he had been locked up in a small cell for a punishment for laziness. As the magical staff blazed away on the furnace, Bobbin could do no more than sit back and wait.

Outside the city, Dame Hetchel sat, ruffling her feathers and sharpening her beak. Ever since the village elders had turned her into a cygnet, she had watched over Bobbin wherever possible, but since he had entered the Forge she hadn't been able to follow.

As she plumed herself, the smoke emerging from the chimneys of the city formed themselves into a strange sign. Hetchel recognised its meaning instantly – the distaff was in danger. Ignoring any danger, she took to the skies then darted down one of the many ventilation shafts into the city.

The sound of something being pushed into his cell was enough to bring Bobbin out of his light slumber – but when he saw what caused the noise he figured he was still dreaming.

Picking up the distaff, he span the Draft of Opening on the door and ran outside. Avoiding the main entrance (Bobbin had resumed his own identity after losing the distaff and he didn't want to answer any questions) he ran down the first set of stairs he saw.

The stairs led into a large chamber where a solitary blacksmith sharpened a sword. Bishop Mandible was standing on the far side of the room, talking to another of the workers. Listening to his conversation Bobbin realised that the Bishop's plans were obviously more sinister than he had first suspected. Bobbin had to find a way to buy himself more time, so, raising the distaff, he reversed the Draft of Sharpening on the blade.

Thinking he'd got away with it Bobbin turned to leave only to walk straight into a couple of guards. "Take him to my transport," commanded the Bishop without even looking up. The only other time Bobbin had flown was when the dragon had mistaken him for a sheep, so he wasn't looking forward much to this particular journey, especially considering the destination.

The flight was surprisingly smooth, but what really took Bobbin's breath away was the view of the tower. Only one word could adequately describe it ... evil. Gravestones littered the front lawn and an eerie green light shone from behind – whoever designed this place certainly had a taste for the dead.

Bobbin was imprisoned in what looked like the Bishop's private zoo. A jailer by the name of Cob stood loyally by Mandible's side, grinning evilly as his master gave the obligatory 'conquering the world' speech.

Bobbin figured that perhaps a show of force would make him think twice so he spun the Opening Draft on the cage door. With a show of bravado, Bobbin stepped out of the cage only to have the distaff snatched from his grasp. Through heaven and high water, Bobbin had managed to hold onto that blasted stick, now twice in half an hour he'd managed to lose it. What would Dame Hetchel have said?

As Mandible walked off with his prize, Cob stood guard over the door preventing Bobbin from stopping his evil plans. With a sigh, he settled for examining the rest of the room. Another of the spheres stood atop a pedestal, but as he moved to study it, Cob interfered ...

There is an old legend about the Weavers concerning their hoods and what lies beneath. Some say you see pure evil, some say you see everything in the universe compressed into one space, the result of which leaves you stark raving mad. Nobody has ever really known the truth – nobody except Cob that is. Despite Bobbin's warnings, the jailer lifted his hood and died a horrible death. Bobbin could feel no pity for him as he headed off to find Mandible.

The Bishop stood on the edge of the parapet, ready to weave the Draft of Opening on the graveyard. Thanks to the Bishop's own magical power the result was pretty devastating, despite all of Bobbin's efforts to stop him. What emerged from the hole filled Bobbin with sheer terror. Although he'd never seen it before, he knew that this was the Chaos in the Great Loom, evil in a solid form. In a flash it disposed (horribly) of Bishop Mandible before wandering off to see what other mayhem it could get up to. Bobbin quickly headed back inside.

Consulting the third sphere revealed what looked like a tragedy for Dame Hetchel. Bobbin was filled with rage: future or no future, he couldn't let this happen to Hetchel. Bobbin raced back out to the parapet. In his haste he had failed to notice that the caged beast had gotten free (probably due to the force of Mandible's Opening Draft) and was sneaking up behind him. At the last moment Bobbin heard the creature's footsteps and spun around to confront it. Unfortunately he lost his balance and fell headlong over the edge, into the mysterious void.

Although he'd prepared himself for a sudden impact with the ground, Bobbin surprisingly found himself floating in mid-air/void. Looking up, he quickly reversed the Opening Draft on the hole to stop the creature from following him. Nearby, he could see another hole and through it he could just about make out the huddled form of Rusty.

Floating through the hole, Bobbin was horrified to see that his newly-found friend had been reduced to a pile of ashes. As his mind searched for an explanation, his hands wove the Healing Draft. Rusty's spirit started to rise from the burnt body and instantly laid into Bobbin with a torrent of verbal abuse.

In an attempt to calm down his irate buddy, Bobbin finished the Healing Draft, restoring the lad to his former self. Rusty apologised for his outburst, thanked him for his new life and headed off to search for his Guild. Bobbin returned to the void and closed the hole.

The next hole led to another scene of detestation. The Guild of Shepherds lay scattered all over their village, another testimony to the evil of chaos. Bobbin wasted no time in spinning the Healing Draft before heading back into the void. Again he closed the hole behind him. Bobbin decided not to waste any more time, he had to save Dame Hetchel, so the next hole he came to was closed instantly.

Onwards he travelled until he came across a magical lake, with what appeared to be swans swimming in it. Could it be? Was this what had happened to his village? Bobbin headed towards it as a very familiar looking swan swam up to meet him. The swan introduced herself, causing a look of disbelief to spread across Bobbin's face. His MOTHER??

Bobbin looked closer and, to his astonishment, saw that it was true. Bobbin's mother explained the danger that faced Dame Hetchel and urged him to hurry. He quickly floated past the lake and through the final hole, back onto Loom Island. Hurrying towards the Great Loom, Bobbin imagined what sort of danger he would face. The test of his life. One wrong move and he would die. He tried to stop thinking about it and hurried into the Sanctuary.

Thankfully, the Great Loom was still intact, which was more than could be said for Hetchel. Pitched in a battle with Chaos did not suit her in her present form, but Bobbin tried his best to help her out. Every time Chaos spun a draft on Hetchel, Bobbin would reverse it.

This battle of Drafts went on until, in a final stroke, Chaos spun the draft of Unmaking on the helpless cygnet. Bobbin couldn't reverse it and was left holding nothing but a feather. He tried Healing it, Shaping it, even Opening it. Nothing worked. Hetchel was gone and Chaos stood there laughing in victory.

Her death won't be in vain though! As a final act, Bobbin stepped up to the Great Loom and spun the Draft of Unmaking onto the very device that he had been brought up to respect...

AMIGA MEGADRIVE ST SEGA SUPER FAMICOM
C64 AMSTRAD PC ENGINE NINTENDO PC LYNX

DM 8.50 SP 7.20
L3800 300 PTA
MAY '91
No. 11

£1.30

COMPUTER + VIDEO GAMES

SNOW BROS!

HAVE A BALL WITH OCEAN'S

MEGA!

CONVERSION!!

OUT NOW

INCREDIBLE!!

EYE OF THE BEHOLDER!

DUNGEON MASTER FINALLY BEATEN?!

REVIEWED INSIDE!

BACK TO THE FUTURE 3 • GODS
ACT RAISER • SEGA SPEEDBALL
CHUCK ROCK • PGA TOUR GOLF
RAD GRAVITY • DICK TRACY!!!

WIN! A SUPER FAMICOM!

CONSOLES GALORE!

A JOURNEY INTO A VIRTUAL REALITY...!

BAGGING CARRIER

After a long enforced absence, Ciarán Brennan once again straps on his sea legs to bring you the benefit of an extensive knowledge of Rainbird's Carrier Command, recently re-released on the Mirror Image label.

Above all, *Carrier Command* is a strategy game – and as with most strategy games a good solid foundation is necessary if you're going to emerge victorious.

A quick glance at the map reveals three distinct types of island: Red, Blue and Green. Blue islands are those that are initially under your control, while Red are hostile and Green are neutral. Your job is to hop from island to island building a supply network and ultimately wiping the opposition off the map.

The first steps to building up a network are simple. Set your course for a nearby island (such as Byrne) and sail there. When you arrive, stop and go to Walrus control. Here load a Walrus with full fuel and a Factory Automatic Command Centre Builder (ACCB).

Set the Walrus on a course for the island, remembering to drop the ACCB as close to the centre as you can. Once this is done, retrieve the Walrus and set your Carrier's course for another nearby island and carry out the same procedure, again making a factory island.

When this is done, set about making the next five islands you capture defence islands. This is very important, although you won't realise it until much later on in the game – the defence islands are situated here as your home island must be protected at all costs.

One of the keys to winning the game is to capture the island of Fulcrum. Take a look at the radar map and home in on the island in the very centre where two grid lines cross. There you'll find both Fulcrum and a group of islands that form a ring around it.

Although it doesn't become apparent until all of the supply lines appear on the map (an island's supply lines don't appear until either you or the enemy has taken it), the islands in that ring interconnect and feed Fulcrum directly like the spokes of a wheel, making it one of the best defended and best supplied islands in the game: capture it and you're a big step closer to victory.

Carry on capturing enemy islands in this fashion, whittling away at the network piece by piece. Don't worry if the enemy is beginning to get close to your home island, as your defence islands should hold him long enough for you to win the game.

When you finally reach the enemy base, don't try to attack Omega as it's far too powerful. Go instead for the home island, using the same technique, but using your surface to surface missiles and Carrier laser to damage the island as much as you possibly can before launching the fateful Mantas.

THE MANTA SHOWN (left) is equipped with laser, which lasts longer than the Assassin missiles, but is far harder to use.

DIVIDE AND CONQUER

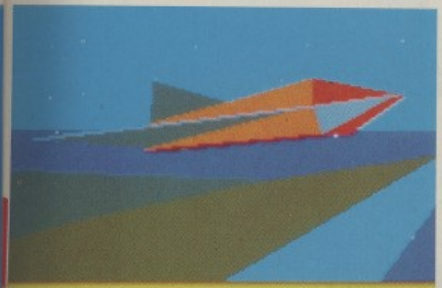
One skill that's vital for successful completion of the game is the ability to capture the enemy's Defence islands. These islands are instantly recognisable as they're equipped with a volcano-like structure, which is actually a massive hangar housing numerous enemy fighters. Their presence, and the fact that the island is bristling with ground-based defences, make these islands difficult nuts to crack.

There are many ways to attack these strongholds, with trial and error in the optional 'action game' the best way of finding your favorite. Here are a couple of ways to get you started...

Sail the Carrier towards the island until its boundaries appear in your radar. Then, turn the Carrier until it's facing away from the island and reverse slowly, keeping an eye on the depth indicator so that you don't 'ground' the ship.

Before you get too close, go to 'drone control' and deploy a complete set with drones at each corner. This may slow your progress down, but it also provides insurance against any early attack.

When you're as close to the island as possible, go to Carrier Defence and launch a viewing drone. As soon as the 'Batcave' command centre comes into view, let it have it with a couple of missiles (you must be facing away from the island for a drone to be effective, as both it and the missiles are launched from the rear of the Carrier).



Launching Manta 1

Once the Batcave is destroyed, the island is knocked out and it's a simple matter to send a Walrus across to plant an ACCB. By the way, this is far easier said than done, but mastering the process is a good idea as it can come in handy later in the game proper.

The second method of destroying the island once again involves knocking out the Batcave, but this time in a much more direct (and consequently more hazardous) fashion – the Kamikaze attack...

Before reaching the island in question, load all of your Mantas with a full complement of missiles (each Manta can hold seven: three in the nose and two on each wing).

Then, when within range, stop the Carrier and launch the maximum of three Mantas, setting them all for a course to points just outside the island's defence range.

When all three have reached their destination, take manual control of the first and begin to circle the island, looking for the Batcave. When you've found it, fly around to the side of the island that it's closest to – this way, when you attack you cut the amount of time that you're actually over the island to a minimum.

Now, fly towards the Batcave at maximum speed (ignoring the attentions of the enemy which will undoubtedly come at you in force) and target the missile cursor on it. As soon as the cursor flashes let loose with a missile and continue to do this until you're either out of missiles, the Batcave is destroyed or you've been shot down.

If the latter occurs, simply take control of the next aircraft and repeat the process until either the job is done or you're out of equipment. Remember that Mantas are remote-controlled and relatively easy to replace, so don't worry too much about losing a couple of them.

IN GENERAL

- Your entire strategy can fall to pieces if you make silly mistakes. Remember to keep your stockpile island on the move – you've had it if you run out of fuel while out of range of the stockpile island.
- Make careful use of the priority settings, always keeping Carrier fuel on high priority, with Manta and Walrus fuel on medium (as they use very little fuel in relation). Keep the Manta missiles and ACCBs on high priority at all times.
- Keep your Mantas and Walruses fully loaded, even while they're in the dock, as it's possible to get more equipment into the holds that way.
- As soon as a Manta returns to the deck, bring it back down into its hangar. Mantas on deck don't only slow the Carrier down, they also cannot be repaired until they're back in the hangar.
- When in control of a Manta or a Walrus, keep its inset radar on all the time: it can give lifesaving information on the position of enemy craft.
- Save the game as soon as you make any kind of progress, no matter how small. Then, should you come a cropper, at least you have something to fall back on.
- Viewing drones are useful not just in conjunction with missiles. They're also an invaluable aid when trying to get the idea of the layout of an enemy island before attacking it.
- Avoid confrontation with the enemy Carrier at all costs, as it's better equipped for a straight fight than you are. If you do come across it by accident, send a Manta on a Kamikaze attack – this usually sends it packing.
- If you think that you've mastered the game, go back and try again, only this time try to take over the enemy's defence islands using Mantas and virus bombs – now there's a challenge!

THE LONG ARM OF THE LAW

One tactic which takes a lot of mastering, but is very effective if you're willing to put the time in is the long-range attack, using either a group of Mantas or a combination of Mantas and Walruses.

The idea here is simple. Load two Mantas with the full complement of missiles and another with a Long Range Communications Pod and two missiles (the LRCP in the nose and a missile on each wing).

The LRCP allows the Mantas to fly far beyond the scope of the Carrier, so choose your target carefully (an island about halfway along the enemy's red supply line is a good bet, as taking this out can slow his progress considerably) and set your Mantas for a point just off its coast. Remember to adjust the speed to medium and the altitude to low when setting the automatic pilot as this increases the Mantas' range considerably.

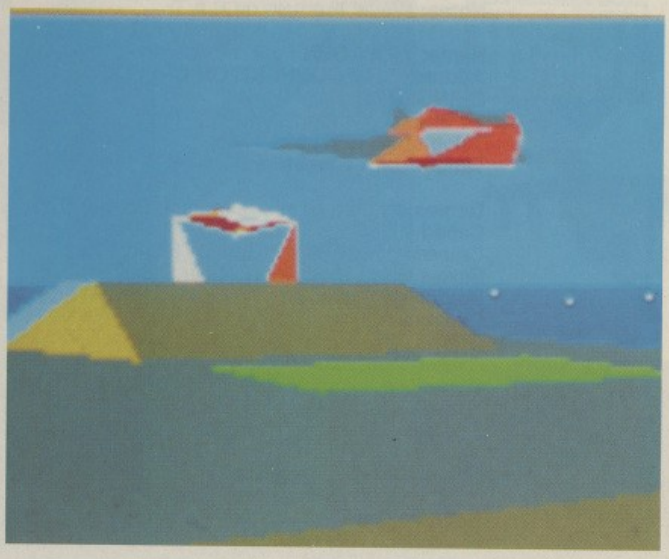
Now launch all three Mantas in quick succession and carry on with the rest of your game – you'll be informed by a text message when the squadron reaches its destination. At this point stop whatever you're doing (if convenient) and switch to manual control of one of the two heavily-armoured Mantas and carry out a Kamikaze attack as normal.

When the Batcave has been destroyed, ditch the remaining Mantas (as they'll usually have too little fuel to get back to the Carrier) and get back to what you were doing.

A similar tactic can be used to take command of Neutral islands by sending a combination of Mantas and Walruses, but this needs more attention as the aircraft move much faster than their water-based counterparts.

These manoeuvres are well worth getting the hang of, as they allow your resource network to expand far more rapidly than if you only used the Carrier. They also allow you to work out variations of your own (such as sending a squadron of Mantas to land on and protect a vulnerable island such as Fulcrum). Another advantage of using these methods is that they give the player something to concentrate on during those long trips between islands.

A MANTA RETURNS – make sure to get it below deck as quickly as possible.



CONTACTS

The response to last month's plea for help has been pretty fair, but we still need more people willing to do their country a service. The following contacts have bravely put their lives on the line and are willing to help you out with all sorts of problems...

Name: PHILIP M.C. SMITH
Address: 8 PARKFIELD
MENSTON
ILKLEY
WEST YORKSHIRE
LS29 6LP
Telephone: (0943) 871010
Times: Sensible hours only.

Games: Badlands; Cadaver; Captive; Continental Circus; Corporation; Damocles; Debut; Dragon's Lair 2: Time Warp; F-19 Stealth Fighter; Flood; Golden Axe; Hard Drivin'; Hard Drivin' 2; Italy 1990; Karateka; Kick Off 2; King's Quests 1, 2, 3 & 4; Leisure Suit Larry 1, 2 & 3; Life and Death; Lotus Esprit Turbo Challenge; MiG-29 Fulcrum; Monty Python's Flying Circus; Operation Harrier;Pang; Police Quests 1 & 3, Populous; Powermonger; Quest For Glory (formerly Hero's Quest); Rick Dangerous 1 & 2; RoboCop 2; Rotox; Saint Dragon; Sim City; Space Quests 1, 2 & 3; Speedball 2; Spindizzy Worlds 2; The Spy Who Loved Me; Strider 2; Stunt Car Racer; Super Cars; Teenage Mutant Hero Turtles; Terramex; The Immortal; Torvak The Warrior; Turrican; Venus The Flytrap; Xenon; Xenon 2; X-Out; Zany Golf.
Notes: Would like help on B.A.T.

Name: ZANY BEN
Address: 112 CONNINGTON CRESCENT
CHINGFORD
E4 6LA
Telephone: (081) 529 1786
Times: Until 7.00pm only.

Games: Altered Beast; Barbarian; Batman The Caped Crusader; Black Tiger; Captain Blood; Chaos Strikes Back; Colorado; Double Dragon 1 & 2; Dragon's Breath; Dragon's Lair 2: Time Warp; Dungeon Master; Exolon; Ghosts 'n' Goblins; Ghouls 'n' Ghosts; Golden Axe; Gold Of The Aztecs; Guardian Angel; Ivanhoe; Last Ninja II; Menace; Midnight Resistance; Nebulus; Night Hunter; Ninja Spirit; Obliterator; Operation Thunderbolt; RoboCop; RoboCop 2; Shadow Warriors; Sly Spy Secret Agent; Soldier Of Light; Speedball 2; Starblade; The Sword And The Rose; Xenon 2.
Notes: Needs help with the crocodile on Level 3 of The Last Ninja II.

Name: ADIL CHAUDRY
Address: 296 GREEN STREET
UPTON PARK
LONDON
E7 8LF
Telephone: (081) 470 8580
Times: 5.00pm - 10.00pm weekdays, all day weekends.

Games: Batman The Caped Crusader; Batman The Movie; Beach Volley; Bermuda Project; Chase HQ; Chase HQ 2; Continental Circus; Daley Thompson's Olympic Challenge; Double Dragon; Double Dragon II; Escape From Colditz; Future Wars; Golden Axe; Indiana Jones The Graphic Adventure; It Came From The Desert; Leisure Suit Larry; Lemmings; Lotus Esprit Turbo Challenge; Maniac Mansion; Midnight Resistance; Midwinter; Monty Python's Flying Circus; Murder; New Zealand Story; Ninja Warriors; Operation Stealth; Police Quest; Rainbow Islands; RoboCop; Shadow Warriors; Supercars; Xenon 2; Zak McKracken.

Name: SEAMUS SLATER
Address: 'CAPRI'
GEORGE STREET
SHOEBURYNESS
ESSEX
SS3 9AB
Telephone: (0702) 294383
Times: 6.00pm - 9.00pm weekdays

Games: Corporation; Killing Game Show; Operation Stealth; Shadow Of The Beast 1 & 2; plus loads of cheats for loads of games and any technical problems with the Amiga.
Notes: Ask for SHAY-MUS not SEE-MUS. Enclose SAE for written hints. When Seamus completed The Killing Game Show he telephoned Martyn Chudley (the programmer) and discovered that his score was higher than any of the Psygnosis' team.

Name: STUART GIBLIN
Address: 3 HARRISON WALK
CHESHUNT
HERTS.
EN8 8PT

● ARE YOU ONE OF THOSE PEOPLE that can complete a game just by looking at the box on the shelf? Does the list of games you've clocked make War and Peace look like an NHS pamphlet? Are you willing to offer your vast gameplaying knowledge to the rest of mankind? If so, we want to hear from you. If you don't mind gamesplayers writing and phoning at all hours of the night, asking how you find the Mystic Sword of Zu to drop the space-platypus on level five, and if you want to see your name in print then you MUST send us a list of your conquests, along with your name, address, telephone number and computer. Tell us when the best times to call you are and any other special requirements you have and we will set you up as a lifeline to the world, in return for which you will receive a free piece of software of our choice. Send all the details to Contacts, The One Magazine, Priory Court, 30-32 Farringdon Lane, London EC1R 3AU.

MIRROR IMAGE

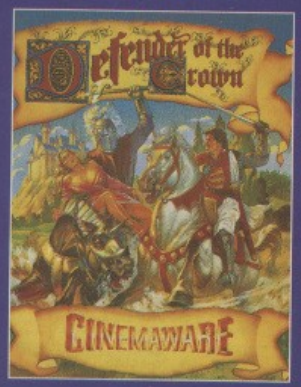
1991 sees the re-introduction of classic 16-bit releases under a new banner – **Mirror Image.**

Commencing with the four releases shown below, **Mirror Image** aims to give you the best in quality at the very best of prices . . .

£9.99

SPEEDBALL

DEFENDER OF THE CROWN



ROCKET RANGER

STRIKEFORCE HARRIER

Available on ST, Amiga and IBM PC & Compatibles

© **1991 Mirrorsoft Ltd.** Irwin House, 118 Southwerk Street, London SE1 0SW. Tel: 071-928 1454, Fax: 071-583 3494.

Mirror Image is a brand name of Mirrorsoft Ltd.

JOIN EUROPES BIGGEST ADVENTURE CLUB

OFFICIAL SECRETS

FOR ADVENTURES AND ROLE PLAYING AND MORE

All the benefits of Special Reserve plus:

- **Confidential.**

Our 32 page bi-monthly magazine is essential reading for those interested in adventures or role-playing games. Written by experts, *Confidential* has covered everything from How to Host a Murder to Which F16 Flight Simulator? Our agents, led by the Master Spy known as "The Boss Upstairs", seek out the secrets of RPG's, FRP's, MUG's, PBM's, Leisure Suit Larry, The Russians, Elvira..... and more.

- **Sim City or Corporation .**

Choose one free for Atari ST, Amiga or IBM. Please phone if you have a different machine.

Of *Corporation*, ***ACE said:*** "Probably the most influential game of this genre making this an essential addition to your collection. ***Zero said:*** If you liked Dungeon Master you'll lurve this.

Of *Sim City*, ***ACE said:*** "Sim City is a politician's - or a gamesplayer's - dream... comparisons spring immediately to mind with Populous... but Sim City seems to have much more depth....". ***C&VG said:*** "Sim City is utterly fab"

- **Help-Line - to help you solve most games.**

Manned weekdays until 8pm and on Sundays (not an 0898 number)

- **Myth - exclusive to Official Secrets members.**

Written by Magnetic Scrolls, authors of Wonderland, *Myth* is a mini adventure set in Ancient Greece. In it you'll meet The Ferryman, cheat Death and face the nine-headed Hydra. *Myth* includes the famous Magnetic Scrolls parser and graphics and is included in the price of membership.

Amiga Format said: "An excellent adventure... witty, cunning and just plain good fun! If you liked Fish! you'll probably like this, because they're very similar in style: you may even prefer *Myth*, it's that good!" **CU 90%, Amiga Format 87%, TGM 85%, Crash 91%**

***Official Secrets* Annual UK Membership**
With 6 issues of *Confidential*, *Myth*, *Corporation* or *Sim City*, *Help-Line* + membership of Special Reserve. **29.99**

UK £29.99. EEC membership £34.99. WORLD Member

Or join Special Reserve only UK £6.00. EEC £8.00. World £10.00.

SALES LINES 0279 600204

WE ONLY SUPPLY MEMBERS BUT YOU CAN ORDER AS YOU JOIN (£6.00) THERE IS A SURCHARGE OF 50P PER GAME FOR TELEPHONED ORDERS (PLEASE PRINT IN BLOCK CAPITALS)

Name & Address

Post Code ____ Tel. ____

Computer ____

Payable to:

Special Reserve or Official Secrets
P.O. Box 847, Harlow, CM21 9PH

Existing members please enter your Membership No.

Special Reserve £6 UK, £8 EEC, £10 World or
Official Secrets £29.99 UK, £34.99 EEC, £39.99 World

Corporation and Myth ☐ or with Sim City and Myth ☐ ONE10

PLEASE ENTER MEMBERSHIP FEE £

Item £

Item £

Item £

Item £

Item £

Software Prices include UK or EEC Postage.
World software orders please add £1.00 per item.
For non-software items such as joysticks or blank disks please add 10% EEC or 25% World for carriage.
Overseas orders must be paid by credit card.

Credit card issue/expiry date ____

*CHEQUE/*POSTAL ORDER/*ACCESS/*VISA

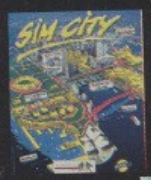
Join Official Secrets or Join Special Reserve

SHOCKING

Over 30,000 m

Over 2,000 products in our catalogue

6.99



11.99

10.99

7.99

7.99

5.99

AMIGA and ATARI ST Shockware

16 BIT	AMIGA	ST
3D CONSTRUCTION KIT	29.99	29.99
3D POOL	7.49	7.49
688 ATTACK SUB	17.49	
A10 TANK KILLER (1 MEG)	22.99	
AD&D DUNGEON MASTER ASS. VOL1	7.49	
AD&D DUNGEON MASTER ASS. VOL2	7.49	
ADVANCED DESTROYER SIMULATOR	16.99	16.99
AFRIKA CORPS	18.99	18.99
AMERICAN ICE HOCKEY		6.99
AMNIOS	13.99	
AMOS (GAMES CREATOR)	30.49	
ANT HEADS (OFTD DATA DISK(1 MEG)	10.99	
ARCHIPELAGOS	5.99	5.99
ARMOUR-GEDDON	17.49	17.49
ATOMINO	17.49	17.49
AWESOME		16.49
AWESOME (WITH T-SHIRT)	15.49	
B.A.T (UBI SOFT)	20.49	
B.A.T (UBI SOFT) (+ SOUND CARD)		23.99
B.S.S JANE SEYMOUR	16.99	16.99
BAAL	5.99	5.99
BACKGAMMON ROYALE	16.99	7.49
BAD LANDS		16.99
BALANCE OF POWER		8.99
BALLISTIX		6.49
BALLYHOO (INFOCOM)	7.99	5.99
BARDS TALE 1		6.99
BARDS TALE 2	9.49	
BARDS TALE 3	17.49	
BATTLE COMMAND (D/S DRIVE)	16.49	16.49
BATTLE OF BRITAIN (D/S DRIVE)	19.99	19.99
BATTLE SQUADRON	8.49	
BATTLESCAPES (BORODINO & ARMADA)	20.49	20.49
BATTLESTORM	16.49	16.49
BEAST 2 (WITH T-SHIRT)	12.99	
BEST SELLERS (SIM CITY & POPULOUS)	18.99	18.99
BETRAYAL	19.99	19.99
BEYOND ZORK (INFOCOM)		7.49
BILLY THE KID	16.99	16.99
BLACK CAULDRON	9.99	8.99
BLOODWYCH	9.99	13.99
BLOODWYCH DATA DISK	7.99	7.99
BLUE MAX	18.49	
BRAT	16.99	16.99
BRIDGE PLAYER 2150 GALACTICA	19.99	
BUCK ROGERS (SSI)	19.99	
CADAVER	16.49	16.49
CAPTIVE	15.99	15.99
CARRIER COMMAND	7.99	7.99
CENTURION - DEFENDER OF ROME	17.49	
CHAMPION OF THE RAJ	16.49	16.49
CHAMPIONS OF KRYNN (1 MEG)	19.99	
CHAMPIONS OF KRYNN (SSI)		19.99
CHAOS STRIKES BACK		10.99
CHAOS STRIKES BACK (1 MEG)	15.99	
CHAOS STRIKES BACK EDITOR		11.49
CHASE H.Q 2 (SCI) (D/S DRIVE)	15.99	15.99
CHIPS CHALLENGE	16.99	16.99
CHRONOQUEST 2	7.99	7.99
CHUCK ROCK	15.99	15.99
CHUCK YEAGER'S AFT 2.0	17.49	
CLOUD KINGDOMS	6.99	
CODENAME ICEMAN (1 MEG) (D/S)		25.49
COHORT - FIGHTING FOR ROME	18.99	18.99
COLONEL'S BEQUEST (1 MEG) (D/S)		25.49
COLORADO	15.49	15.49
CONQUESTS OF CAMELOT (1 MEG)		25.49
CORE DOUBLE PACK (TORVAK THE WARRIOR & CAR-VUP)	16.99	16.99
CORPORATION	14.99	14.99
CORPORATION MISSION DISK	10.99	10.99
CORRUPTION (M/SCROLLS)	6.99	6.99
CRACK DOWN	6.99	
CRIME DOESN'T PAY	16.99	16.99
CRIMEWAVE	16.99	
CRUISE FOR A CORPSE	19.99	19.99
CURSE OF THE AZURE BOND (1 MEG)	19.99	19.99
CUTTHROATS (INFOCOM)	9.99	
CYBERCON 3	16.99	
DAMOCLES	8.99	8.99
DAMOCLES MISSION DISK 1	8.99	8.99
DAMOCLES MISSION DISK 2	8.99	8.99
DAS BOOT (THE BOAT - SUB SIM)	18.49	
DEADLINE (BUDGET)	9.49	9.49
DEATH TRAP	11.99	11.99
DEFENDER OF THE CROWN	8.99	8.99
DEJA VU	7.99	3.99
DEJA VU 2	7.99	7.99
DELUXE MUSIC CONSTR SET	45.99	
DELUXE PAINT		39.99
DELUXE PAINT 3	49.99	
DEMONIAK	19.99	19.99
DEUTEROS	16.99	16.99
DISNEY ANIMATION STUDIO	59.99	
DRAGON WARS	17.49	
DRAGON'S LAIR (1 MEG)	28.99	
DRAGON'S LAIR (D/S DRIVE)		28.99
DRAGON'S LAIR 2 (D/S DRIVE)	27.99	27.99
DRAKKHEN	11.99	11.99
DUNGEON MASTER		10.99
DUNGEON MASTER (1 MEG)	10.99	
DUNGEON MASTER EDITOR	8.99	8.99
DYNASTY WARS	6.49	6.49
E-MOTION	6.49	6.49
EAST VS. WEST		12.99
ECO PHANTOMS	16.99	16.99
ELITE	9.49	8.99
ELVIRA - MISTRESS OF THE DARK		20.49
ELVIRA - MISTRESS OF DARK (1 MEG)	20.49	
ENCHANTER (BUDGET)	9.49	9.49
EPIC	16.99	16.99
ESCAPE FROM SINGE'S CASTLE	28.99	
ESWAT (D/S DRIVE)	16.99	16.99
EUROPEAN SUPER LEAGUE	6.99	16.99
EYE OF HORUS	3.99	3.99
EYE OF THE BEHOLDER (SSI) (1 MEG)	19.99	
F15 STRIKE EAGLE		8.49
F15 STRIKE EAGLE 2	21.99	21.99
F16 FALCON	12.99	10.99
F16 FALCON MISSION DISK 1	11.99	11.49
F16 FALCON MISSION DISK 2	11.99	11.99
F18 INTERCEPTOR	9.49	
F19 STEALTH FIGHTER	19.99	19.99
F29 RETALIATOR	16.49	16.49
FAST BREAK (BASKETBALL)	5.99	
FERRARI FORMULA 1	9.49	9.49
FEUDAL LORDS	16.49	16.49
FIRE AND BRIMSTONE	16.99	
FISH! (M/SCROLLS)	6.99	6.99

16 BIT	AMIGA	ST
FISTS OF FURY (DYNAMITE DUX, NINJA WARRIORS, SHINOBI, DBLE DRAGON 2)	19.99	19.99
FLAMES OF FREEDOM (MIDWINTER 2)	21.99	21.99
FLIGHT OF THE INTRUDER	20.49	20.49
FLIGHT SIMULATOR 2	23.49	23.49
FOOLS ERRAND	7.49	7.49
FUN SCHOOL 2 (2-6) (6-8) OR (8+)	13.49	13.49
FUN SCHOOL 3 (2-5) (5-7) OR (7+)	15.99	15.99
GAUNTLET 3	7.99	7.99
GETTYSBURG (ARC) (D/S DRIVE)	19.99	19.99
GETTYSBURG (SSI)	7.99	
GFA BASIC V3.0 COMPILER	23.49	23.49
GFA BASIC V3.0 INTERPRETER	36.99	36.99
GHENGHIS KHANN	20.99	
GODS	15.49	15.49
GOLD OF THE AZTECS (D/S DRIVE)		13.99
GOLD RUSH! (SIERRA)		7.99
GOLDEN AXE	16.99	16.99
GRAND PRIX CIRCUIT	6.99	
GRAVITY	6.99	8.49
GREG NORMAN'S GOLF	16.99	16.99
GUILD OF THIEVES (M/SCROLLS)	6.99	6.99
GUNBOAT	16.99	
GUNSHIP	16.99	
HARD DRIVIN'	7.99	7.49
HARD DRIVIN' 2 (D/S DRIVE)	16.99	16.99
HARPOON	19.49	
HEROQUEST (GREMLIN)	17.49	17.49
HILL STREET BLUES	16.99	16.99
HITCH-HIKERS GUIDE (BUDGET)	9.49	9.49
HOLLYWOOD COLLECTION (D/S)	18.99	18.99
HOLLYWOOD HIJINX (INFOCOM)	17.49	7.49
HOME ACCOUNTS (DIGITA)	23.49	23.49
HOUND OF SHADOW	8.49	9.49
HUNT FOR RED OCTOBER	16.99	
HUNTER	16.99	16.99
HYBRIS	2.99	
IMMORTAL (1 MEG) (D/S DRIVE)	17.49	17.49
IMPERIUM	17.49	17.49
INDIANAPOLIS 500	16.99	
INFESTATION		14.49
INFOCOM (INFOCOM)	13.99	
INTERPHASE	3.99	
IT CAME FROM THE DESERT (1 MEG)	10.99	
IVAN STEWARTS OFF-ROAD RACER	16.99	16.99
J. NICKLAUS GOLF	17.49	17.49
J. NICKLAUS VOL1 COURSES	10.49	
J. NICKLAUS VOL2 INT COURSES	10.49	
JAMES POND	16.99	16.99
JET (SUBLOGIC)	14.99	
JET + JAPAN DISK (SUBLOGIC)		7.99
JUDGE DREDD		14.49
K-SPREAD 2.0 (SPREADSHEET)	42.99	
KHALAAN	14.99	
KICK OFF	6.99	6.99
KICK OFF 2 (D/S DRIVE)	13.49	13.49
KICK OFF 2 FINAL WHISTLE (D/S)	10.49	10.49
KICK OFF 2 GIANTS OF EUROPE (D/S)	7.99	7.99
KICK OFF 2 RETURN TO EUROPE (D/S)	7.99	7.99
KICK OFF 2 - WINNING TACTICS (D/S)	6.99	6.49
KID GLOVES	11.99	
KILLING CLOUD (D/S DRIVE)	19.49	16.99
KILLING GAME SHOW	9.99	17.49
KIND WORDS 2.0 (W/PROCESSOR)	19.99	
KINGS QUEST 4 (1 MEG) (SIERRA)	25.49	
KINGS QUEST 4 (SIERRA) (D/S)		25.49
KNIGHTS OF LEGEND	18.49	18.49
KULT	5.99	5.49
LANCELOT (LEVEL 9)	15.99	
LASER SQUAD	7.49	
LEATHER GODDESSES (BUDGET)		9.49
LEATHER GODDESSES (INFOCOM)	16.99	
LEGEND OF THE SWORD		4.99
LEISURE SUIT LARRY 1, 2 & 3 (1 MEG)	31.49	31.49
LEMMINGS	16.99	16.99
LIFE AND DEATH	15.99	15.99
LINE OF FIRE (D/S DRIVE)	16.99	16.99
LOMBARD RAC RALLY	16.49	16.49
LOOM	19.99	
LOOM (D/S DRIVE)		19.99
LOTUS ESPRIT TURBO CHALLENGE	15.99	15.99
LURKING HORROR (INFOCOM)		5.99
M1 TANK PLATOON	19.99	19.99
MEAN STREETS (D/S DRIVE)	16.99	16.99
MEGATRAVELLER 1	19.49	19.49
MENACE	5.99	5.49
MERCENARY	8.99	8.99
MERCHANT COLONY	18.99	18.99
METAL MASTERS	15.99	15.99
MICROPROSE SOCCER	8.49	8.49
MIDNIGHT RESISTANCE	16.49	16.49
MIDWINTER	19.99	19.99
MIG 29 FULCRUM	22.49	22.49
MONSTER PACK 1 (SHADOW OF THE BEAST, INFESTATION, NITROL (D/S)	17.49	17.49
MONTY PYTHONS FLYING CIRCUS	14.49	14.49
MURDER (D/S DRIVE)	16.99	14.49
MYSTICAL (D/S DRIVE)	8.99	8.99
N.A.R.C (D/S DRIVE)		15.49
NAM 1965-75	19.49	19.49
NAVY S.E.A.L.S	16.49	16.49
NEBULUS 2	16.99	16.99
NEVER MIND	6.49	6.49
NIGEL MANSELL'S GRAND PRIX	7.99	7.99
NIGHTSHIFT	16.99	16.99
NORTH AND SOUTH (D/S DRIVE)		10.99
ORBUS		21.99
ORBUS (WITH T-SHIRT)	21.99	
OPERATION HARRIER (D/S DRIVE)		16.99
OPERATION STEALTH (D/S DRIVE)	16.99	16.99
OVERRUN (1 MEG) (SSI)	19.99	
PAINTWORKS (ART PACKAGE)		5.99
PANG	16.49	13.99
PANZA KICK BOXING	16.99	16.99
PAWN (M/SCROLLS)	6.99	6.99
PGA GOLF TOUR	16.99	
PHOTON PAINT	6.49	
PIRATES	16.99	16.99
PLANETFALL (BUDGET)	9.49	9.49
PLAYER MANAGER	13.49	13.49
POLICE QUEST 2 (1 MEG) (SIERRA)	25.49	
POLICE QUEST 2 (SIERRA) (D/S)		25.49
POOL OF RADIANCE (1 MEG) (SSI)	19.99	19.99
POPULOUS PROMISED LANDS	9.49	9.49
POWER UP (CHASE H.Q. TURRICAN, X-OUT, ALTERED BEAST, RAINBOW ISLANDS)	19.99	19.99
POWERDRIFT	5.99	5.99
POWERDROME	9.49	
POWERMONGER (D/S DRIVE)	18.99	18.99

16 BIT	AMIGA	ST
POWERMONGER DATA DISK 1 (D/S)	11.99	11.99
POWERWORKS (MAXIPLAN PLUS SPREADSHEET, KIND WORDS 2 & INFOFILE DATABASE)	36.99	
PREDATOR 2	16.99	16.99
PRESIDENT ELECT (SSI)		
PRINCE OF PERSIA	16.99	16.99
PRO TENNIS TOUR 2	17.99	17.99
PROPHECY - VIKING CHILD		10.99
PROTEXT WORD PROCESSOR V4	64.99	64.99
PUBLISHERS CHOICE DTP (1 MEG)	59.99	
PURPLE SATURN DAY	5.99	
QUEST FOR GLORY (1 MEG) (SIERRA)	25.49	25.49
QUEST FOR GLORY 2 (1 MEG)	25.49	25.49
QUESTRON 2 (SSI)	6.49	7.49
R-TYPE		4.99
RAILROAD TYCOON	21.99	21.99
RAINBOW ISLAND	16.49	13.99
RICK DANGEROUS	7.49	7.49
RICK DANGEROUS 2	16.99	16.99
ROADWAR EUROPA (SSI)		6.99
ROBOCOP	15.49	
ROBOCOP 2 (D/S DRIVE)	15.99	15.99
ROCKET RANGER	8.99	5.99
ROGUE TROOPER		14.49
RORKE'S DRIFT	15.99	15.99
RUBICON	16.99	16.99
S.T.U.N RUNNER	14.99	14.99
SEASTALKER (INFOCOM)	10.99	5.99
SECRET OF MONKEY ISLAND	16.99	16.99
SHADOW OF THE BEAST (D/S DRIVE)	7.99	8.99
SHADOW WARRIORS	16.49	13.99
SHADOWGATE	15.99	
SHERMAN M4		14.99
SIERRA TRIPLE PACK (COLONELS BEQUEST, CONQUESTS OF CAMELOT, CODENAME ICEMAN) (1 MEG)	25.49	
SILENT SERVICE (SUB SIM)	8.99	
SILKWORM	7.99	
SIM CITY	11.99	11.99
SIM CITY TERRAIN EDITOR	10.49	
SKULL AND CROSSBONES	17.49	17.49
SKYCHASE		6.99
SKYFOX	4.99	
SORCERER (BUDGET)	9.49	
SORCERER (INFOCOM)		9.49
SPACE HARRIER 2	6.99	
SPACE QUEST 3 (SIERRA) (D/S)	25.49	25.49
SPEEDBALL 2	8.99	8.99
SPELLBOUND	8.49	
SPELLBREAKER (INFOCOM)		9.49
SPINDIZZY 2	16.99	16.99
SPIRIT OF EXCALIBUR	19.99	19.99
SPY WHO LOVED ME	7.49	
STAR RAY		7.49
STARCROSS (INFOCOM)	13.99	
STARFLIGHT	17.49	17.49
STARGLIDER 2	7.99	7.99
STATIONFALL (INFOCOM)		9.49
STORM ACROSS EUROPE (SSI)	19.49	19.49
STUNT CAR RACER		16.99
SUPER CARS 2	16.99	
SUPER GRIDRUNNER		16.99
SUPER MONACO GRAND PRIX	16.99	16.99
SUPERBASE PERSONAL 2 (DATABASE)	71.49	71.49
SUPERPLAN (1 MEG) (SPREADSHEET)	71.49	71.49
SUPREMACY	19.99	19.99
SWITCHBLADE 2	16.99	16.99
SWIV	17.99	17.99
SWORD OF SODAN	9.99	9.99
TEAM SUZUKI	16.99	16.99
TEAM YANKEE	19.49	19.49
TEENAGE MUTANT HERO TURTLES D/S	15.99	15.99
TEENAGE QUEEN (STRIP POKER)	11.49	11.49
TESTDRIVE 2		16.99
THE LOST PATROL	16.49	16.49
THEME PARK MYSTERY	8.49	8.49
THREE STOOGES (CINEMAWARE)	6.99	6.99
THUNDERBIRDS	4.99	
THUNDERSTRIKE		16.99
TIMES OF LORE	6.99	
TOKI	16.49	16.49
TOURNAMENT GOLF	16.99	16.99
TOWER OF BABEL		14.49
TOYOTA CELICA GT RALLY	16.99	16.99
TRIAD VOL 2 (MENACE, BAAL, TETRIS)	7.99	
TRIAD VOL 3 (SPEEDBALL, BLOOD MONEY, ROCKET RANGER)	11.99	11.99
TRINITY (INFOCOM)		9.49
TURBO CUP (WITH CAR)		16.99
TURBO SILVER GRAPHICS+ANIMATION	111.49	
TURRICAN 2	15.49	
TURRICAN 2 (D/S DRIVE)		15.99
TV SPORTS BASKETBALL (CINEMAWARE)	11.99	
TV SPORTS OF STEEL	19.99	
ULTIMA 5	18.99	
ULTIMATE RIDE	15.99	
UNIVERSAL MILITARY SIM 2 (1 MEG)	20.49	20.49
UMS 1 CIVIL WAR DISK		8.99
UMS 1 VIETNAM DISK		8.99
UNINVITED		16.99
UNTOUCHABLES		4.99
VIRUS	14.49	
VIZ		14.49
VOYAGER	10.99	
WAR GAME CONSTRUCTION SET	19.99	
WARHEAD	7.49	
WARLORDS (1 MEG)	17.49	
WELLTRIS	13.99	
WHEELS OF FIRE	19.99	
WINGS (1 MEG) (CINEMAWARE)	18.99	
WINNING TEAM	19.99	
WIPE OUT	5.99	
WISHBRINGER (BUDGET)	9.49	
WOLFPACK		19.49
WOLFPACK (1 MEG)	19.99	
WONDERLAND (1 MEG) (M/SCROLLS)	19.99	
WORKBENCH 1.3	14.99	
WRATH OF THE DEMON	18.99	
XENOMORPH	8.49	
XENOMORPH (D/S DRIVE)		16.99
XENON 2, MEGABLAST	7.99	
XIPHOS	16.99	
Z-OUT	12.99	
ZORK 1 (INFOCOM)	9.99	
ZORK 2 (BUDGET)	9.49	
ZORK 2 (INFOCOM)		
ZORK 3 (BUDGET)	9.49	

NG PRICES

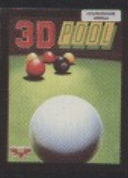
Join Special Reserve or Join Official Secrets

bers in our clubs

Over 40,000 games in our warehouse

6.99

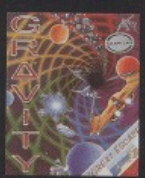
8.49



8.49

9.99

9.99



6.99

Nintendo Gameboy

Official UK Version. Free Shockware holsters & membership.

Gameboy + Tetris, two player lead, stereo headphones and batteries + FREE Special Reserve membership + FREE Shockware Gameboy holsters **71.99**

Gameboy Software etc. (MORE SOON)

ALLEYWAY	16.49	SOLAR STRIKER	16.49
BALLOON KID	16.49	SPIDERMAN	16.49
DOUBLE DRAGON	16.49	SUPER MARIO LAND	16.49
GARGOYLES QUEST	16.49	TENNIS	16.49
GOLF	16.49	WIZARDS AND WARRIORS	16.49
KING OF THE ZOO	16.49	SHOCKWARE GAMEBOY HOLSTERS + BELT	7.99
KWIRK	16.49		
QIX	16.49		
REVENGE OF GATOR	16.49		

INEVITABLY, SOME GAMES SHOWN MAY NOT YET BE RELEASED.
Inter-Mediates Ltd. Reg. Office: 2 South Block, The Maltings, Sawbridgeworth, Herts CM21 9PG. VAT reg. no. 424 8532 51

Atari Lynx

Official UK Version. Free Special Reserve membership.

Lynx + mains powerpack (essential) + multi-player lead & California Games + FREE Special Reserve membership **119.99**

Lynx Software

3D BARRAGE	27.49	PINBALL SHUFFLE	27.49
720 DEGREES	27.49	RAMPAGE	27.49
APB	27.49	ROAD BLASTERS	27.49
BASKETBRAWL	27.49	ROBO SQUASH	23.99
BLOCK OUT	27.49	RYGAR	27.49
BLUE LIGHTNING	21.99	S.T.U.N RUNNER	27.49
CHEQUERED FLAG	27.49	SCRAPYARD DOG	27.49
CHIPS CHALLENGE	21.99	SHANGHAI	27.49
ELECTRO COP	21.99	SLIMEWORLD	23.49
GATES OF ZENDECON	21.99	TOURNAMENT CYBERBALL	27.49
GAUNTLET 3	27.49	TURBO SUB	27.49
GRID RUNNER	27.49	VINDICATORS	27.49
KLAX	27.49	WARBIRDS	27.49
LYNX CASINO	27.49	WORLD CUP SOCCER	27.49
MS PACMAN	27.49	XENEPHOBE	27.49
NFL SUPER-BOWL	27.49	XYBOTS	27.49
PACLAND	27.49	ZALOR MERCENARY	27.49
PAPERBOY	27.49		

ATARI LYNX CASE FOR LYNX, ACCESSORIES & GAMES 16.99

Sega Megadrive

Official UK Version. Free extra Joypad and membership.

Megadrive + Altered Beast + Joypad + FREE extra TURBO Joypad + FREE Special Reserve membership **189.99**

Megadrive Software

AFTERBURNER 2	27.99	MICKEY MOUSE	31.99
ALEX KIDD IN THE ENCHANTED CASTLE	24.49	MOONWALKER	27.99
ARNOLD PALMER GOLF	27.99	MYSTIC DEFENDER	27.99
ARROW FLASH	27.99	PGA GOLF TOUR	31.99
BATTLE SQUADRON	31.99	PHANTASY STAR 2	46.99
BUDOKAN	31.99	POPULOUS	31.99
COLUMNS	24.49	RAMBO 3	24.49
CRACK DOWN	27.99	REVENGE OF SHINOBI	27.99
CYBERBALL	27.99	SHADOW DANCER	27.99
DICK TRACY	31.99	SPACE HARRIER 2	27.99
DYNAMITE DUKE	27.99	STRIDER	35.99
ESWAT	27.99	SUPER HANG ON	27.99
FORGOTTEN WORLDS	27.99	SUPER LEAGUE BASEBALL	27.99
GAIN GROUND	27.99	SUPER MONACO G/PRIX	27.99
GHOSTBUSTERS	27.99	SUPER REAL BASKETBALL	27.99
GHOULS N GHOSTS	35.99	SUPER THUNDERBLADE	27.99
GOLDEN AXE	27.99	SWORD OF SODAN	31.99
HERZOG ZWEI	27.99	SWORD OF VERMILLION	35.99
ISHIDO	26.49	THUNDERFORCE 2	27.99
J.B. DOUGLAS BOXING	27.99	TRUXTON	27.99
JAMES POND	31.99	TWIN HAWK	27.99
JOHN MADDENS FOOTBALL	31.99	WORLD CUP ITALIA 90	24.49
LAST BATTLE	27.99	ZANY GOLF	31.99
		ZOOM	24.49

POWER BASE CONVERTER (Runs Master System Games)	28.49
TURBO (FAST FIRE) JOYPAD	14.99
SEGA MEGADRIVE ARCADE POWER STICK	34.99
CHAMP EXPLORER JOYSTICK	19.99

Joysticks, Mice etc.

UK Postage included, EEC add 10%, World add 25%.

Back Row (left to right)

Quickjoy Supercharger (ST, AMIGA ETC)	10.99
Quickjoy Jet Fighter (ST, AMIGA ETC)	13.99
Quickjoy Superboard (ST, AMIGA ETC)	17.99
Quickjoy M5 15 Pin Joystick for IBM PC	15.99
Quickshot Warrior 15 Pin Analogue for IBM PC	12.99

Front Row

Competition Pro 5000 Mean Green	10.99
Competition Pro Extra Glo Red	13.49
Naksha Mouse and Mat For Amiga or ST	24.99
Competition Pro Extra Glo Green	13.49
Competition Pro Extra Clear Autofire	13.49

Amiga/ST Joysticks etc. not shown.

COMPETITION PRO 5000 BLACK	10.99
COMPETITION PRO 5000 RED/WHITE	9.99
COMPETITION PRO 5000 WHITE	10.99
COMPETITION PRO EXTRA COMBAT	12.99
CONTRIVER C820A ATARI ST MOUSE	29.99
EUROMAX COBRA JOYSTICK	12.99
QUICKJOY INFRA-RED JOYSTICK	34.99
MOUSE MAT (QUALITY SOFT MAT)	3.99
POPULOUS/FALCON LEAD (NULL MODEM CABLE)	7.99
FOUR PLAYER AMIGA/ATARI ST JOYSTICK ADAPTOR (FOR KICK OFF 2, LEATHERNECKS, GAUNTLET 2 AND TV SPORTS BASKETBALL FITS PRINTER PORT)	7.99

IBM PC Joysticks etc. not shown.

COMPETITION PRO PC STYLE 9 PIN (IBM)	13.49
DYNAMICS IBM GAMES CARD WITH TWIN JOYSTICK PORT INTERFACE (9 PIN)	19.99
DYNAMICS PC STARTER PACK (GAMES CARD, COMPETITION PRO JOYSTICK, ROBOCOP, BASEBALL, VICTORY ROAD, WIZBALL)	39.99
EUROMAX IBM ANALOGUE 3001 (15 PIN) JOYSTICK	10.99
QUICKSHOT QS-120 DELUXE IBM GAMES CARD WITH TWIN JOYSTICK PORT INTERFACE (15 PIN)	14.99
CONTRIVER MULTI DPI MOUSE, MAT, HALDER AND SOFTWARE	28.99
SOUND BLASTER IBM STEREO/MUSIC/VOICE/SOUND BOARD	119.99
SOUND BLASTER BOARD + JOYSTICK + TWO SPEAKERS	139.99

Special Reserve NRG CYBERZINE

SPECIAL RESERVE CLUB BENEFITS INCLUDE:

- ***NRG*** (Energy magazine) **N**ews, **R**eviews and **G**raphics. Screen shots, pack shots, charts, latest Giga-Savers. Game reviews in every issue. Night City Cybertoon and the kill-or-die adventures of the Cyberpunk ***NRG*** street gang - It's Cyber-fantastic! ***NRG*** - bi-monthly to all Special Reserve members.
- ***Release Schedules***, sent bi-monthly with updated catalogue information.
- ***Sales hotline***, to 8pm weekdays, 5-30pm Saturdays and 5pm Sundays. 0279 600204
- ***Fast despatch*** of stock items ***individually wrapped***.
- ***Written confirmations*** (receipts) sent when we receive each order.
- ***Catalogue, Membership Card & Folder*** for ***NRG***.
- ***Refunds*** or change of order on request if delayed.
- ***No Obligation*** to buy. We do not require a signed contract, nor is there any age requirement. With Special Reserve there are no hidden costs.

ANNUAL UK MEMBERSHIP UK £6.00 EEC £8.00 WORLD £10.00 **£6.00**

Commodore Amiga

In stock at time of publication.

Amiga 500 Screen Gems Pack — COMPUTER WITH MOUSE, TV MODULATOR, BACK TO THE FUTURE 2, DAYS OF THUNDER, BEAST 2, DELUXE PAINT 2 & NIGHTBREED. **349.99**

Amiga Peripherals

PHILIPS 8833 ARTIST COLOUR STEREO MONITOR	269.99
AMIGA A590 20 MEG HARD DRIVE (AUTOBOOT WITH KICKSTART, SOCKETS FOR 2 MEG OF RAM, SCSI INTERFACE FOR PERIPHERALS CONNECTION)	269.99
CUMANA EXTERNAL 3.5" 880K DISK DRIVE	79.99
AMIGA A501 512K RAM UPGRADE TO 1 MEG (GENUINE COMMODORE ITEM WITH CLOCK)	44.99
ZYDEC 512K RAM UPGRADE TO 1 MEG WITH CLOCK	34.99
NAKSHA MOUSE, BRACKET AND MAT (AMIGA OR ST)	24.99
COVER FOR AMIGA	3.99
COVER FOR MONITOR	5.99
KIND WORDS 2 (WORD PROCESSOR)	19.99
POWERWORKS SUITE INCLUDING KIND WORDS 2 WORD PROCESSOR, MAXIPLAN PLUS SPREADSHEET, INFOFILE DATABASE AND MAIL MERGE	36.49

Disks 'n bits

50 SONY 3.5" DS/DD DISKS + LABEL **£21.99**

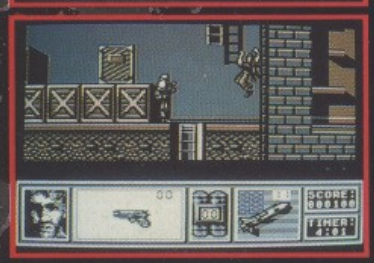
3.5" SONY DS/DD DISK PLUS LABEL	59p each
3.5" SONY HIGH DENSITY DISK (1.4 MB)	1.29
PLASIC STORAGE BOX, HOLDS TEN 3.5" DISKS	1.50
10 PACK TDK 48 TPI 5.25" DS/DD DISKS (360K)	6.99
10 PACK TDK 96 TPI 5.25" DS/DD DISKS (720K)	8.99
10 PACK TDK HD 5.25" DISKS (1.4 MB)	9.99
3" MAXELL CF2 DISK + LABEL FOR PCW	1.99
3.5" DISK HEAD CLEANER	2.99
DISK BOX 3.5" (100 CAP) DIVIDERS, LOCKABLE	9.99
DISK BOX 3.5" (80 CAP) DIVIDERS, LOCKABLE	8.49
DISK BOX 3.5" (40 CAP) DIVIDERS, LOCKABLE	6.99

AMERICA'S TOP SECRET WEAPON

Super-charged super-fighters who risk all defending America against the world's deadliest forces.
A combat unit of indomitable strength and courage.
A rescue team of unparalleled skill and daring.
THE BEST OF THE BEST

NAVY SEALS

AMSTRAD SPECTRUM
COMMODORE
ATARI ST AMIGA



ORION PICTURES CORP.
© COPYRIGHT 1990

"...a brand new and quite sophisticated game-style. Alongside the excellent Mathew Cannon sonics are the superlative graphics. The detail in level one is phenomenal and ranks among the best I've seen..."
"On the subject of presentation I can't enthuse enough. The cartridge is put to full use with presentation screens galore, while instantaneous loading makes for superb momentum. It gives a real coin-op feel and shows what cartridges really can do." ZZAP 92%

OCEAN SOFTWARE LIMITED
6 CENTRAL STREET
MANCHESTER M2 5NS
TEL: 061 832 6633
FAX: 061 834 0650